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DUNAVAN WASTE OIL
ILD980794929
HRS/SF
(Volume 1 of 2)

CERCLA

Expanded Site Inspection

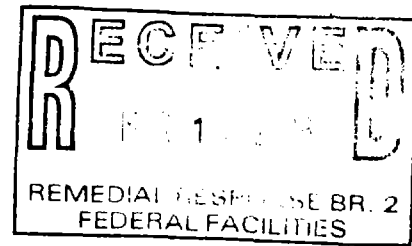


Illinois Environmental
Protection Agency

EPA Region 5 Records Ctr.



296249



EXPANDED SITE INSPECTION REPORT

for:

**DUNAVAN OIL
OAKWOOD, ILLINOIS**

ILD 980794929

**PREPARED BY:
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF LAND
REMEDIAL PROJECT MANAGEMENT SECTION
SITE ASSESSMENT UNIT**

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*received and accepted by US EPA
Laura J Ripley 03/20/2008*

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1.0 INTRODUCTION

In September 2005 the Illinois Environmental Protection Agency's (IEPA) Office of Site Evaluation was tasked by the United States Environmental Protection Agency (U.S. EPA) Region V to conduct an Expanded Site Inspection (ESI) at the Dunavan Waste Oil (ILD980794929) facility east of the Village of Oakwood, in Vermilion County, Illinois.

The primary objective of an Expanded Site Inspection is to address critical hypotheses or assumptions that were not completely supported during the Site Inspection. The Expanded Site Inspection will gather information to fully establish background conditions, fill in data gaps, or establish attribution to site operations. At the conclusion of the Expanded Site Inspection, it will be determined whether the site qualifies for possible inclusion on the National Priorities List (NPL) or should be dropped from further Superfund consideration. Additionally, the Expanded Site Inspection supports removal and enforcement actions and collects data to support further Superfund or other response actions.

The Expanded Site Inspection is not intended to be a detailed extent of contamination or risk assessment. Efforts requiring intensive background investigation or specialized techniques are normally conducted during the next phase in the Superfund process after a site is placed on the NPL and becomes eligible for remedial funding. The Expanded Site Inspection is performed under the authority of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) commonly known as Superfund.

Dunavan Oil was added to CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) in August 1980 in response to the State of Illinois' concerns that past site activities have caused soil contamination and may have caused groundwater contamination of the immediate and surrounding area and contamination to

drainage routes and receiving bodies of surface water and sediments.

The site was subsequently evaluated in the form of a CERCLA Preliminary Assessment (PA) by the Illinois Environmental Protection Agency (IEPA) in September 1986. A CERCLA Screening Site Inspection (SSI) was conducted at the site in August 1990 by the Region 5 CERCLA Site Assessment Program field investigation team, Ecology and Environment, Inc. (E & E). A CERCLA Site Team Evaluation Prioritization (STEP) inspection was conducted March 22 & 23, 1995 at the site by the IEPA. In addition to the formal PA, SSI, STEP, and ESI the site has been visited on numerous occasions by Agency field office personnel and others, starting in the spring of 1979, in order to collect soil/sediment, waste and groundwater samples from both on and off-site locations.

2.0 SITE BACKGROUND

2.1 SITE DESCRIPTION

The Dunavan Oil facility in Oakwood, Illinois is an inactive, former waste oil and waste solvent storage facility located in Vermilion County (Figure 1). The former plant structures and former active areas on the property occupy approximately 4.5 acres of land on the eastern half of an 8.44 acre tract of land at this location, formerly known as Dunavan Waste Oil. Prior to establishment of Dunavan Oil on this particular parcel of land it was vacant and part of the local strip mine system.

The specific location of the Dunavan Oil site is in the Northeast 1/4 of the Northeast 1/4 of Section 17, and the Northwest 1/4 of the Northwest 1/4 of Section 16, Township 19 North - Range 12 East in Vermilion County (Figure 2). Bordering the 4.5 acre site to the north-northwest are the Conrail Railroad tracks, beyond which is Kickapoo State Park (directly north and northeast) and a residential area northwest, to the south-southeast is U.S. Route 150, across which are residences and another portion of Kickapoo State Park, to the east-northeast is a group of trailer homes some of which are unoccupied, and to the west is property owned by Mr. Dunavan which contains an occupied trailer home situated approximately 300 feet west of the former waste oil storage site. The residence is rented by the son of the current owner of the eastern half of the former Dunavan Oil site. A total of twenty-one single family residences are located within one-quarter mile of the site boundaries, most to the south, southeast and northwest.

On March 22, 2006 personnel of the IEPA's CERCLA Office of Site Evaluation visited the site. This visit consisted of a visual inspection to determine the status of the facility, to identify previous and potential sampling points and to identify any health and safety concerns which may be associated with the site. There were no site representatives present accompanying Agency

personnel on the reconnaissance of the property and surrounding area. The site is located in a rural setting with the former tank area of the facility, as noted previously, entirely fenced including a locked gate at the areas entry point. The former ponded area, on the south half of the property, was noted to be fifty percent covered with standing water. The other fifty percent being soft and mostly damp. Some small areas in the damp portion were firm and almost dry on the surface. No obvious signs of contamination were observed and no odors detected in this area. The former tank area was observed to be raised 5' - 8' above the rest of the site. Grass and weeds were noted to cover ninety percent of this area with a concrete pad covering the remainder. The pad is located approximately 250 feet east of the west fence line and is approximately 50 feet east to west and 30 feet north to south. A few locations within the vegetated portion of this area were found to be bare and a few others appeared slightly stressed. There were no obvious signs of contamination observed and no odors detected in this area. Observations off-site noted an area to the east of the site which, at one time, contained a number of occupied trailer homes. There are two or three remaining and currently occupied but there were no responses to knocks on doors on March 22, 2006. During the April 2006 sampling event one of the trailer residents (owner of the property containing the trailers) was contacted and it was learned that the trailers are on a common groundwater well located approximately 350 feet east of Dunavan's eastern property line. A request by the IEPA OSE sampling team to obtain a drinking water well sample was granted by the owner. To the south of the site, across U.S. Route 150, six to eight residences were noted to be occupied. Three of which were contacted and asked if a drinking water sample from their respective wells could be obtained by Agency personnel. These requests were granted. To the west-northwest of the site, north of the Conrail tracks, three residences were noted to be occupied and between 600 feet to 2500 feet of sites northwest corner. These residences also obtained drinking water from individual

groundwater wells. Two of these residents granted the Agency's request to obtain a sample from their wells.

A drainage ditch is present between the north fence line of the site and the Conrail tracks north of the site. The ditch was observed to be the recipient of site runoff from the west, north and east portions of the site. Vegetation was noted to be healthy along the ditch and the runoff areas. Once in this ditch topographic influence routes flow toward the east. Just within the northeast corner of the site runoff from the ditch empties into a small basin and flows into a corrugated steel culvert. The culvert allows drainage to flow under the Conrail tracks. Drainage at this point flows north approximately 1000 feet through steep undulating terrain until it empties into Pond #6 in Kickapoo State Park. Vegetation in this terrain consisted of small to large trees of varying variety with very little under growth. A Boy Scout hiking trail runs along the eastern edge of the subject site and also parallels the drainage ravine into Kickapoo State Park. There were no obvious signs of contamination present in or along any of the drainage ways. This drainage route, up to the point at which runoff enters Pond #6, is considered the overland flow portion of the surface water drainage route.

Notable features within a four mile radius of the site include a State Park and wetlands (reference Appendix A - Four Mile Radius Map). The drinking water supply for the City of Danville is the Vermilion River, west of Danville. The water intakes are located approximately five miles east of the site. According to area topographic maps and site reconnaissance information there is no surface water drainage from the site toward the intakes. Within a four mile radius of the site drinking water is obtained via public or private groundwater wells. There are approximately 5117 persons obtaining drinking water in this manner. According to National Wetland Inventory Maps (Reference Figure 3), wetlands are located in Kickapoo State Park, which surrounds the Dunavan Oil site. Access to the sites former tank area is restricted by

means of a six foot high chain link fence topped with two strands of barbed wire. A lockable gate also secures this area. The remainder of the site, including the former oil separating pond areas, south of the fenced area, is accessible to the public.

2.2 SITE HISTORY AND OPERATIONS

The Dunavan Oil site was reportedly begun as a waste oil storage facility on the subject property in 1953, by property owner Glen Dunavan. Available written records indicate that the facility has been operating at its present location since 1964. Plant operations consisted of collection of used automotive and industrial oils, road oil, solvents, resin, alcohol, paint, ink sludge and waste ink with the intent to reclaim these materials. Waste brought to the site was placed into one of approximately 40 - 50 above ground tanks or into one of seven oil separating ponds (lagoons). It appears that no attempt was ever made to reclaim any of the wastes brought to the site. Wastes appear to have been brought to this facility and subsequently transferred to other associated facilities in Springfield, Rock Island and McCook, Illinois known as Pierce Waste Oil / Motor Oils Refining Energy Company, Inc. (MORECO). Many of the tanks were located on a portion of the site which was approximately five feet higher in elevation than the rest of the site. Present under some of these tanks was a concrete pad. The remainder were located on soil overlain with gravel. The seven ponds were located in low lying areas south of the tanks and north of U. S. Route 150 (Reference Figure 4).

Mr. Glen Dunavan was the owner of the property from 1953 to 1979. In June 1979 Pierce Waste Oil Service bought the storage facility from Mr. Dunavan. Pierce Waste Oil continued to operate the facility as a storage facility and transfer site until June 1983 when it sold the facility to MORECO of McCook, Illinois. MORECO continued to operate the facility in the same manner as the previous owners. In May 1989, MORECO ceased operations at this site. In April

1991, the IEPA entered into a consent order with MORECO to address the abandoned wastes and extensive soil and groundwater contamination at the Illinois facilities of Oakwood, Springfield and Rock Island. In June 1991, MORECO filed for Chapter 11 Reorganization after promising to resolve the problems at their sites. In filing Chapter 11, MORECO forfeited the ownership of the Oakwood property in December 1992. The property was in trust from December 1992 to 2004 in the name of Remediation Trust Agreement c/o Jeffrey Strange & Associates of Wilmette, Illinois. The property was turned over to Vermilion Co. in 2004 and then sold via a tax sale to the current owner Charles Campbell of Champaign, Illinois in 2005.

2.3 PREVIOUS INVESTIGATIONS

CERCLA investigative activities began in 1979 due to concern of the Vermilion County Health Department. The department had been receiving numerous citizen complaints regarding highly offensive odors emanating from the Dunavan site. The site was visited on numerous occasions from the spring of 1979-1990 to collect soil/sediment, waste, surface water and groundwater samples from both on and off-site locations. During the initial investigation in the spring of 1979, IEPA personnel detected the odors emanating from the ponds on-site. Analysis of surface water samples collected revealed semi-volatile, polychlorinated biphenyl (PCB), and heavy metal contamination. These findings revealed that on-site operations violated the IEPA issued operating permit. Numerous subsequent sampling events conducted by IEPA, USEPA, contractors, etc. focused mainly on characterization of tank contents. During these sample events evaluation of soil/sediment, ponded water and groundwater was also conducted. Contaminants detected most frequently in the tanks were aliphatic hydrocarbons, naphthalene, methylnaphthalene, dimethylnaphthalene, trimethylnaphthalene, toluene, xylene, and substituted benzenes. Many flash point readings were found to be below 140 degrees F. Many of the tank

samples contained high concentrations of EP Toxicity for lead. Ponded water and soil samples also contained the same constituents found in tank samples. During fall 1980 and spring 1981 the individual ponds were drained into one main pond, the oil skimmed from the surface and pumped into tank trucks for transport to the Pierce Waste Oil refinery in Springfield, Illinois for recycling. Once the ponds were drained, they were backfilled and covered with clean fill. However, IEPA has no evidence that any residue or soil was sampled for potential contamination or removed due to actual contamination prior to the ponds being backfilled. The site was evaluated in September 1986 with the completion of a Preliminary Assessment by IEPA. In August 1990, Ecology and Environment (E & E) conducted a Screening Site Inspection (SSI) of the Dunavan Oil facility. Soil/sediment samples collected by E & E in August 1990 revealed elevated levels of several volatile, semi-volatile and heavy metal constituents. The volatile and semi-volatile levels were not noted to exceed RAL's or MCL's. However, a number of heavy metal constituents did exceed these levels. In April 1992, Illinois Department of Public Health personnel collected nine residential drinking water well samples within close proximity to the site. Only one well indicated any constituent above detection limits. That well contained chloroform at three parts per billion, which is well below the safe drinking water standard. This compound may have been a by-product of chlorination, as the well was relatively new.

During the time period between December 1992 and May 1994, the U.S. EPA Emergency and Enforcement Response Branch conducted a time critical removal action at the site. This consisted of characterizing tank materials, removing these materials and removing the tanks. These tasks were completed on July 8, 1994. Further remedial work, including soil and groundwater remediation, was postponed until additional funds became available to perform further investigative activities.

On March 22 & 23, 1995 a CERCLA STEP investigation was completed by IEPA. During

the STEP, nine on-site soil, one off-site soil, four drainage ditch sediment and three private drinking water well samples were collected. Sample results can be found in Appendix D.

2.4 REGULATORY STATUS

RCRA inspections at the site began as early as 1973 with quarterly site inspections conducted by the IEPA Peoria Field Operations Section. In November 1980, Pierce Waste Oil filed a Notification of Hazardous Waste Activities Form Part A application. In October 1981, Dunavan Oil was permitted by IEPA to accept only wastes defined as non-hazardous by Subtitle C, Part 261 of RCRA. In November 1981, U.S.EPA recommended that Dunavan Oil be placed in the non-regulated category, because the filing of the Part A application was considered to be protective, and wastes stored on-site would not be subject to RCRA standards because of their non-hazardous status. In December 1984, MORECO submitted a proposal for the cleanup and partial RCRA closure of the site. Closure is still pending as of 1997. Information currently available regarding other regulatory authority suggests that the site does not fall under the authority of the Atomic Energy Act (AEA), the Uranium Mill Tailings Radiation Control Act (UMTRCA), or the Federal Insecticide, Fungicide or Rodenticide Act (FIFRA).

3.0 EXPANDED SITE INSPECTION ACTIVITIES

3.1 SAMPLING ACTIVITIES

On April 11 - 13, 2006 Illinois EPA personnel from the Office of Site Evaluation collected eighteen soil samples (includes one duplicate), ten sediment samples (includes one duplicate) and seven drinking water samples (includes one duplicate) during the ESI at the site. Two background soil samples were collected and one background sediment sample was collected, these are included in the number of samples noted above. All samples were analyzed for the full Target Compound List (TCL). For a list of all constituents analyzed during this investigation please refer to the Target Compound List found in Appendix B.

3.1.1 SOIL SAMPLES

Soil samples were collected from various locations around the site, some of which were near previously studied areas. This was done to determine if contamination found during previous sampling events was still present and if so in what concentrations. Previously unsampled areas were targeted to better determine the areal extent of contamination on-site. Soil sample depth was generally determined by the first indication of contamination present, if any. The background soil samples (X116 & X118) were collected from locations east and west of the site, respectively. Soil samples were obtained by use of the IEPA's Geoprobe, stainless steel hand auger, or stainless steel trowel. Table 1 provides an overall summary of soil samples collected during the ESI. Highlighted concentrations within Table 1 indicate key soil samples in which contaminants were detected at concentrations at least three times background levels, exceeding Superfund Chemical Data Matrix (SCDM) criteria, and/or U.S. EPA Removal Action Levels (RAL's). Figures 5 & 6 illustrate the location of soil and sediment samples. Table 3 describes each soil sample with its location, depth, and physical appearance. Additional

discussions concerning the analytical results of these samples and their impact on the soil exposure pathway may be found in Section 3.2 (Analytical Results), Section 5.0 (Migration Pathways) of this ESI report.

3.1.2 SEDIMENT SAMPLES

Sediment samples were collected to determine if site run-off had transported contamination off-site and into the drainage ditch, ravine and Pond #6 north of the site. The background sediment sample (S108) was collected from a point 100 feet west of the northwest corner of the site in a drainage ditch running between the site and the Conrail R.R. tracks north of the site. Sediment samples were collected with either a stainless steel trowel or a stainless steel mud or bucket hand auger. Sediment samples S101 – S103, S109, and S110 were collected beneath the water surface in Pond #6 with mud augers. The remaining sediment samples (S104 – S108) were collected within respective drainage ways with stainless steel trowels or stainless steel bucket augers. No water was present in the overland flow portion of the drainage ways (S104 – S108) at the time of sampling. Table 1 provides an overall summary of sediment samples collected during the ESI. Highlighted concentrations within Table 1 indicate key sediment samples in which contaminants were detected at concentrations at least three times background levels, exceeding SCDM criteria, and/or U.S. EPA RAL's or Ontario Sediment Quality Guidelines and U.S. EPA Ecotox (Ecotox) Thresholds (for samples S101 – S103, S109 and S110). Figures 5 & 6 illustrate the location of soil and sediment samples. Table 3 describes each sediment sample with its location, depth, and physical appearance. Additional discussions concerning the analytical results of these samples and their impact on the soil exposure pathway may be found in Section 3.2 (Analytical Results), Section 5.0 (Migration Pathways), and Section 6.0 (Additional Risk Based Objectives) of this ESI report.

3.1.3 GROUNDWATER SAMPLES

Samples from nearby residential drinking water wells were collected to determine if contaminants from the site had migrated to the local groundwater supply. Samples were collected from one off-site residential drinking water well located east of the northeast corner of the site, two located northwest of the site and three located to the south and southwest of the site. Drinking water wells in the area range in depth from approximately 30 feet northeast of the site to 90 to 180 feet northwest and south of the site. Shallow wells in the area are screened in sand and gravel deposits of glacial drift. The deeper wells are screened either just above a shale unit, which is immediately below the sand and gravel deposits or in the shale itself, relying on water located in cracks and crevices. Table 2 provides an overall summary of drinking water samples collected during the ESI. Highlighted concentrations within Table 2 indicate key drinking water samples in which contaminants were detected at concentrations at least three times background levels, exceeding SCDM, and/or National Drinking Water Standards Maximum Contaminant Level's (MCL's). Figure 7 illustrates the location of the residential drinking water samples. Additional discussions concerning the analytical results of these samples and their impact on the groundwater migration pathway may be found in Section 3.2 (Analytical Results), and Section 5.0 (Migration Pathways) of this ESI report.

3.2 ANALYTICAL RESULTS

3.2.1 SOIL ANALYSIS

Organic soil samples were analyzed by Envirosystems Inc. in Columbia, Maryland. Inorganic soil samples were analyzed by Sentinel, Inc. in Huntsville, Alabama. During the attempt to find groundwater on the Dunavan property soil moisture was found at various depths

within the respective bores at seven of the fifteen locations throughout the property (X101, X102, X105, X107, X109, X113, and X114). Moist soil horizons ranged in thickness from one foot to fourteen feet below ground surface. Soil moisture was apparent in X101 from 1' – 12', X102 from 1' – 14', X105 from 2' – 4', X107 from 8' – 10.5', X109 from 5' – 6', X113 from 4' – 5', and X114 from 0.6' – 8'. Petroleum/solvent odor was present at various depths in four of the fifteen soil boring locations on the property. Odor was detected in horizons ranging in thickness from one foot to fourteen feet (7' – 8' in X114, 7' – 14' in X104, 4' – 9' and 13.5' – 20' in X111/X112, and 2' – 16' in X113). Analysis of soil samples collected within the respective horizons indicated a few detectable constituent concentrations, several samples contain one or more constituents at least three times background levels, however none were above SCDM criteria or RAL's.

3.2.2 SEDIMENT ANALYSIS

Organic soil samples were analyzed by Envirosystems Inc. in Columbia, Maryland. Inorganic soil samples were analyzed by Sentinel, Inc. in Huntsville, Alabama. Sediment samples S104 - S108 reflect more characteristics of soil than they do of sediment as they are only exposed to water during runoff characterized as overland flow due to precipitation events. Because these areas are considered within the overland flow segment of the runoff route analytical results are compared to SCDM criteria and RAL's. Samples S104 –S108 revealed various levels of several semi-volatile constituents, pesticide constituents, PCB's, and inorganic constituents. Several samples contain one or more constituents at least three times background levels, however none were above SCDM criteria or RAL's. Reference Table 1. Analytical results from locations S106, S107 and S108 appear to be influenced by the proximity to the former railroad track as numerous compounds commonly associated with, and found in railroad

ties, along railroad rights-of-way, and drainage ditches adjacent to the rights-of-way are also detected in samples S106 - S108. The compounds in question are not considered attributable to the Dunavan site as no samples from within the Dunavan property boundaries contain quantitative amounts of these compounds. Further north along the overland flow segment all constituents but one are below detection limits. The analytical results from in-water sediment samples (S101 – S103, S109 and S110) from pond #6 are compared to Ontario Sediment Quality Guidelines and Ecotox (Ecotox) Thresholds. Analysis indicates that the Ontario Guidelines Severe Effect Level for iron and the Ecotox level for lead is exceeded in sample S110. All other constituent concentrations are below respective guidelines and levels. Reference Table 1.

3.2.3 GROUNDWATER ANALYSIS

Residential drinking water well samples were collected from one off-site residence located east of the northeast corner of the site (G203), two (plus a duplicate (G289)) located northwest of the site north of the Conrail tracks (G204/G289 & G205), and three located to the south and southwest of the site south of U.S. 150 (G201, G202, & G206). Analytical results from these drinking water well samples were compared with SCDM criteria, and MCL's. Analysis of samples indicate a variety of constituents in detectable concentrations, however none are three times background or exceed SCDM criteria, and/or MCL's (Reference Table 2).

Photographs of the April 2006 sampling event can be found in Appendix C of this report.

A complete analytical data package for the Dunavan Oil site is located in Appendix E, under a separate cover in Volume 2 of the ESI report.

4.0 SITE SOURCES

This section includes descriptions of the various hazardous waste sources that have been identified at the Dunavan Waste Oil site. The Hazard Ranking System defines a "source" as: "Any area where a hazardous substance has been stored, disposed or placed, plus those soils that have become contaminated from migration of hazardous substance." This does not include surface water or sediments below surface water that has become contaminated.

Information obtained during the Expanded Site Inspection identified activities, and identified contaminated soil in the former waste tanks area and contaminated soil in the former waste ponds area as sources of contamination at the Dunavan Waste Oil site. As additional information becomes available, the possibility exists that additional sources of contamination may exist.

4.1 CONTAMINATED SOIL - FORMER WASTE TANKS AREA

During the 2006 ESI sampling event sixteen soil samples were collected from fifteen locations within the Dunavan Oil site property boundaries. Four of these samples (X110, X111, X112 (duplicate of X111), and X113) were collected from three locations in an area that formerly contained approximately 40 - 50 above ground waste storage tanks. Analysis of these four samples indicated one semi-volatile constituent present in sample X110 (collected from 16.0' - 17.5' below ground surface (bgs)) at very low estimated concentrations, and thirteen semi-volatile constituents in sample X113 (15.0' - 18.0' bgs) at low estimated concentrations (refer to Table 1). Constituent concentrations were below detection limits in samples X111/X112.

Analysis of tank contents by IEPA was first completed in May 1982 and continued periodically through March 1992. Tanks were removed from the site periodically from October

1985 through May 1994. Prior to tank removal, all contents of these tanks were removed and transferred to the Springfield, Illinois Pierce Waste Oil facility. According to shipping manifests, at the time of removal, total volume of waste removed from the tanks was approximately 100,000 gallons. The four soil samples collected in the former tank area were obtained from depths of 5' - 7' (X113), 15' - 18' (X111/X112), and 15' - 17.5' (X110) in areas of former contamination. No contamination was detected in the respective borings above the upper indicated sampling interval at each respective location. See Table 1 for a complete summary of the analytical results from the soil samples.

4.2 CONTAMINATED SOIL - FORMER WASTE LAGOONS AREA

During ESI sampling activities conducted on April 11 - 13, 2006, of the sixteen soil samples previously mentioned, eight (X101 - X106, X114 and X115) were collected from the area formerly occupied by seven waste lagoons. Boring was completed at sample locations X101 - X106 through use of the IEPA's Geoprobe. A hand auger was utilized at locations X114 and X115 due to moist ground conditions preventing Geoprobe access. As mentioned previously, in Section 1.2, IEPA inspections in 1980 and 1981 noted the draining of the lagoons. The contents of the lagoons were consolidated into one lagoon, oil was skimmed from the surface, pumped into a tank truck and transported to Pierce Waste Oil in Springfield, Illinois for recycling. Once the lagoons were drained the area was covered with clean fill. IEPA has no evidence that any residue or soil from the bottom of the lagoons was sampled for contaminants or removed prior to the filling of these lagoons. Sample analysis from the April 2006 ESI indicated a few semi-volatile constituents detected at low estimated levels at five of the indicated locations (X102, X103, X105, X106, and X115). Samples were collected at depths of 5' - 7' (X103), 7' - 9' (X102), 9' - 11' (X105 & X106), and 8' - 9' (X115). Reference Table 1.

5.0 MIGRATION PATHWAYS

As identified in CERCLA's Hazard Ranking System, the Office of Site Evaluation evaluates three migration pathways and one exposure pathway. Sites are evaluated on their known or potential impact these pathways have on human health and the environment. The following paragraphs will evaluate the groundwater, surface water, soil exposure, and air migration pathways.

5.1 GROUNDWATER

According to the Illinois State Geological Survey, the Illinois State Water Survey, the United States Department of Agriculture (USDA) Soil Conservation Service and a 1980 letter from the Illinois Institute of Natural Resources, the area surrounding the site has been extensively strip-mined, altering much of the surficial geology along stream valleys and edges of uplands. The soils at the site are developed in glacial deposits of the Pleistocene Epoch of the Quaternary Period. Typically these soils are mixtures of gravels, sands, silts and clays. The Modern soils (0' - 6') have recently been mapped by the Soil Conservation Service and are present in the form of various loams at or surrounding the site. The thickness of glacial drift deposits beneath the uplands is approximately 40 - 45 feet. The drift consists primarily of non-water-yielding glacial till with some thin, interbedded lenses of sand, gravel, and silt. The surficial till which underlies the thin layer of loess in the area is classified as belonging to the Batestown Member of the Wedron Formation. The Batestown Till Member is approximately 10 - 30 feet thick and described as a dark gray, olive, silty, loam till (28% sand, 38% silt, 34% clay). Although mainly non-water-yielding, in some areas, the till, if lenses of sand and gravel exist, will produce small quantities of water. Beneath the glacial deposits, and if the glacial deposits are lithologically favorable hydrologically connected to these deposits, are the upper

bedrock of the Modesto and Carbondale Formations of Pennsylvanian Age. Interbedded shale, sandstone, limestone, coal and clay comprise these Pennsylvanian deposits. The bedrock surface in the Danville area dips significantly toward the east and south. The dip is noted to be as much as 30 feet per mile from the site eastward to Danville. The water-yielding capability of the Pennsylvanian rocks depends primarily on the number, size and degree of interconnection of water-filled cracks and crevices within the rock that are penetrated by a well bore or where the Pennsylvanian rocks directly underlie permeable deposits of water-bearing till. The underlying Devonian and Silurian limestone and dolomite deposits serve as the next available source of groundwater. Groundwater yields from these deposits are restricted to the upper portion where the bedrock is more creviced. Locally, the Glenwood-St. Peter Formations of Ordovician Age yield significant quantities of groundwater, however in some instances tends to be very mineralized.

Groundwater in the vicinity of the Dunavan Oil property is used for drinking water by residents located mainly south, west and north of the site and to a lesser degree to the east. The nearest well to the site (G201) is approximately 200 feet south of the southern property line, south of U.S. Route 150. According to the owner of the residence the well is 120 feet deep. Illinois State Water Survey well logs indicate that within four miles of the site, most private wells can be found at depths from 30 to 180 feet deep. There are approximately 3417 persons obtaining drinking water from individual private/residential wells within a four mile radius of the site. The only municipal groundwater well within four miles of the site is located two miles to the west in the Village of Oakwood. According to the Village Water Superintendent this well was capped in 1980 but could be brought back to active status if needed. The well would supply approximately 1700 persons in the Village with drinking water. The primary source of the towns' water supply is the Salt Fork of the Vermilion River which flows east toward the

Dunavan Oil property. If river level becomes critically low the well could be activated. This well is seventy-three feet deep, finished and screened in a sand and gravel aquifer between eight and twenty-two feet thick located at the base of the glacial drift.

During the IEPA's April 2006 sampling event acquisition of on-site groundwater samples was attempted at four separate locations, however none produced any water. Due to site soil characteristics it appears that groundwater on-site may be perched in wet weather conditions. However, if weather conditions are dry over an extended period of time perched water would not be present. There have been no official reports of complaints or indications of groundwater contamination by any private residential water well user in the area surrounding the site. However, all residents whose wells were sampled during the April 2006 sampling event indicated that they do not drink the water and that it smells strongly of sulfur.

No wellhead protection areas (as designated by Section 1428 of the Safe Drinking Water Act) exist near the site.

A listing of the number of persons utilizing public wells and the approximate number of individuals using private water wells in each distance category are presented in the table below.

Individuals utilizing public and private water wells

<u>Distance (mi)</u>	<u>Public</u>	<u>Population</u> <u>Private</u>
On-site	0	0
0 - 1/4	0	57
1/4 - 2	0	31
2 - 1	0	122
1 - 2	0	746
2 - 3	1700	1036
3 - 4	0	1425

The number of people on private wells was calculated using 2.42 people per household in Vermilion County, as established by the U.S. Census Bureau (2000)

5.2 SURFACE WATER

Surface water drainage from the site flows into a drainage ditch, paralleling the north property boundary of the site, which was observed to be the recipient of site runoff from the west, north and east portions of the site. There is no runoff from the south portion of the site. Surface water from the southern portion of the site either infiltrates into surrounding soils or pools at certain locations in the former lagoon areas south of the former tank area and evaporates. Runoff accumulated in the north ditch follows topographic influence and flows toward the east. Just within the northeast corner of the site the ditch empties into a small basin and flows into a corrugated steel culvert. The culvert allows drainage to flow under the Conrail tracks. Drainage at this point flows north approximately 1000 feet through steep undulating terrain until it empties into Pond #6 in Kickapoo State Park. From this point the extent of the surface water route is approximately 3600 feet north to the north end of Pond #6 which is the terminus of the surface water route. The probable point of entry (PPE) to surface water from the site is located at the confluence of the drainage way from the site and Pond #6. According to the Illinois Department of Conservation, Division of Fisheries, Pond #6 is listed as a fishery and used for recreational purposes. Pond #6 is the closest water body to the site, also is the closest wetland area to the site, and the only wetland with direct contact with potential site runoff, as indicated on the National Wetlands Inventory Maps. The wetlands maps also indicate that numerous wetlands are located in all directions within a four mile radius of the site. These wetlands range in size from one acre to approximately thirty 30 acres. Analytical data resulting from the April 2006 ESI investigation revealed the presence of several semi-volatile and inorganic constituents at levels above background concentrations within the overland flow segment along this route. Within the in-water segment, analysis indicates that the Ontario Guidelines Severe Effect Level for iron and the Ecotox level for lead is exceeded in sample

S110. However, this does not reflect attribution to the site as iron and lead were not found in environmentally significant concentrations on the Dunavan site, in any property drainage areas, at the start of the overland drainage way (S107 & S106), nor at its termination at Pond #6 (S103) to warrant a determination that these compounds are attributable to Dunavan Oil. All other constituent concentrations are below respective guidelines and levels.

5.3 SOIL EXPOSURE

As mentioned previously, the facility is no longer an active business. A fence is present around the former tank area of the facility but not around the other portions of the property. There are various signs of recreational use on the property ie. foot prints, tire imprints, etc. Access to all portions of the property, except the tank area, can be easily accomplished. Using U.S. Geological Survey topographical maps (Appendix A) and U.S. Census data, an estimated 210 people live within one mile of the site. The nearest resident is approximately 200 feet south-southeast of the facility, south of Rt. 150. According to the Illinois Department of Natural Resources (IDNR) there are no sensitive environments, other than wetlands within the four mile target distance limit of the site (see wetland discussion in Section 5.2 of this report). There are no schools or daycare facilities within 200 feet of documented soil contamination.

Nearby population within one-mile of the site

<u>Distance (mi)</u>	<u>Population</u>
On-site	0
0 - 1/4	57
1/4 - 1/2	31
1/2 - 1	122

The number of people was calculated using 2.42 people per household in Vermilion County, as established by the U.S. Census Bureau (2000)

Soil samples collected during the 2006 ESI were obtained from fifteen locations on the Dunavan Oil property. Samples X101 - X106, X114, and X115 were collected from areas where the former waste ponds existed. Sample depths between 5 feet and 9 feet below grade were analyzed in this area. Sampling at this depth range was to determine if pond residue remains in place. Previous sampling events concentrated on surface sampling. Analysis of the samples collected during the ESI indicates that a few semi-volatile, pesticide, and inorganic constituents remain in the soil below SCDM criteria and RAL's. Samples X110, X111/X112, and X113 were collected from the area where the former waste tanks were located. Sample depths between 5 feet and 18 feet below grade were analyzed in this area. Analysis of these samples indicates that a few semi-volatile, pesticide, and inorganic constituents remain in the soil below SCDM criteria and RAL's. Reference Table 1.

5.4 AIR ROUTE

During the April 11 - 13 2006 ESI, no formal air samples were collected. Due to the fact that the facility has been inactive since 1985 and the property appeared to be well vegetated in most locations on site, the potential for particulate migration from the property seems minimal. An estimated 7071 people live within a four-mile radius of the site. No schools or daycare facilities are located within 200 feet of observed soil contamination.

Individuals potentially exposed to air-borne contaminants

<u>Distance (mi)</u>	<u>Population</u>
On-site	0
0 - 1/4	22
1/4 - 2	31
2 - 1	122
1 - 2	868
2 - 3	2614
3 - 4	3379

The number of people were calculated using 2.42 people per household in Vermilion County, as established by the U.S. Census Bureau (2000)

6.0 ADDITIONAL RISK BASED OBJECTIVES

This section discusses additional risk-based objectives used to evaluate the Dunavan Waste Oil site. These objectives have not been used to assess the site for Hazard Ranking System (HRS) purposes.

Sediment samples that were collected during the ESI were compared to ecological benchmarks to help determine whether site activities have impacted the surface water pathway. Two different ecological benchmarks were used for this comparison: Ontario Sediment Quality Guidelines (Ontario) and U.S. EPA Ecotox (Ecotox) thresholds. Ontario standards are non-regulatory ecological benchmark values that serve as indicator of potential aquatic impacts. Levels of contaminants below Ontario benchmarks indicate a level of pollution that has no effect on the majority of sediment-dwelling organisms. Levels of contaminants above a severe effect Ontario benchmark can cause a pronounced disturbance of the sediment dwelling community. Ecotox thresholds are ecological benchmarks above which there is sufficient concern regarding adverse ecological effect to warrant further site investigation. Ecotox thresholds and Ontario Sediment Quality Guidelines are to be used for screening purposes and are not to be used as regulatory, site-specific cleanup standards or remediation goals.

As noted previously, the in-water segment of the surface water route, samples S101 – S103, S109, and S110, were evaluated in comparison to the guidelines and thresholds indicated above. Analysis indicates that the Ontario Guidelines Severe Effect Level for iron and the Ecotox threshold for lead is exceeded in sample S110. All other constituent concentrations are below respective guidelines and levels.

7.0 SUMMARY

The Dunavan Oil facility (ILD 980794929) is an inactive, former waste oil and waste solvent storage facility located approximately 5 miles west of Danville, Illinois in Vermilion County. Illinois EPA was tasked by USEPA to perform an ESI on the site during fiscal year 2007. This occurred on April 11 – 13, 2006.

The Dunavan Oil site reportedly began as a waste oil storage facility on the subject property in 1953, by property owner Glen Dunavan. Available records indicate that the facility has been operating at its present location since 1964. Plant operations consisted of collection of used automotive and industrial oils, road oil, solvents, resin, alcohol, paint, ink sludge and waste ink. Waste brought to the site was placed into one of approximately 40 - 50 above ground tanks or into one of seven oil separating ponds (lagoons). It appears that no attempt was ever made to reclaim any of the wastes brought to the site.

Mr. Glen Dunavan was the owner of the property from 1953 to 1979. In June 1979 Pierce Waste Oil Service bought the storage facility from Mr. Dunavan. Pierce Waste Oil continued to operate the facility as a storage facility and transfer site until June 1983 when it sold the facility to Motor Oils Refining Energy Company, Inc. (MORECO) of McCook, Illinois. MORECO continued to operate the facility in the same manner as the previous owners. In May 1989, MORECO ceased operations at this site. In April 1991, the IEPA entered into a consent order with MORECO to address the abandoned wastes and extensive soil and groundwater contamination at the Illinois facilities of Oakwood, Springfield and Rock Island. In June 1991, MORECO filed for Chapter 11 Reorganization after promising to resolve the problems at their sites. In filing Chapter 11, MORECO forfeited the ownership of the Oakwood property in December 1992. The property was in trust from December 1992 to 2004 in the name of Remediation Trust Agreement c/o Jeffrey Strange & Associates of Wilmette, Illinois. The

property was turned over to Vermilion Co. in 2004 and then sold via a tax sale to the current owner Charles Campbell of Champaign, Illinois in 2005.

CERCLA investigative activities began in 1979 due to concern of the Vermilion County Health Department. The department had been receiving numerous citizen complaints regarding highly offensive odors emanating from the Dunavan site. During the initial investigation in the spring of 1979, IEPA personnel detected the odors emanating from the ponds on-site. Analysis of water samples collected revealed semi-volatile, polychlorinated biphenyl (PCB) and inorganic contaminants. Numerous subsequent sampling events conducted by IEPA, USEPA, contractors, etc. focused mainly on characterization of tank contents, however, evaluation of soil/sediment, ponded water and groundwater was also conducted. Contaminants detected most frequently in the tanks were aliphatic hydrocarbons, naphthalene, methylnaphthalene, dimethylnaphthalene, trimethylnaphthalene, toluene, xylene, and substituted benzenes. Ponded water and soil samples also contained the same constituents found in tank samples. During fall 1980 and spring 1981 the ponds were drained, backfilled and covered with clean fill. There is no evidence that any residue or soil was sampled for potential contamination or removed due to actual contamination prior to the ponds being backfilled. Subsequently the site was evaluated in September 1986 with the completion of a Preliminary Assessment by IEPA. In August 1990, Ecology and Environment conducted a Screening Site Inspection (SSI) of the Dunavan Oil facility. Soil/sediment samples indicated detectable levels of various volatile, semi-volatile and inorganic constituents. The volatile and semi-volatile levels were not in exceedance of RAL's or MCL's. However, a number of inorganic constituents did exceed these levels. In April 1992, Illinois Department of Public Health personnel collected nine residential drinking water well samples within close proximity to the site. Only one well indicated any contamination. That well contained chloroform at three parts per billion, which is well below the safe drinking water

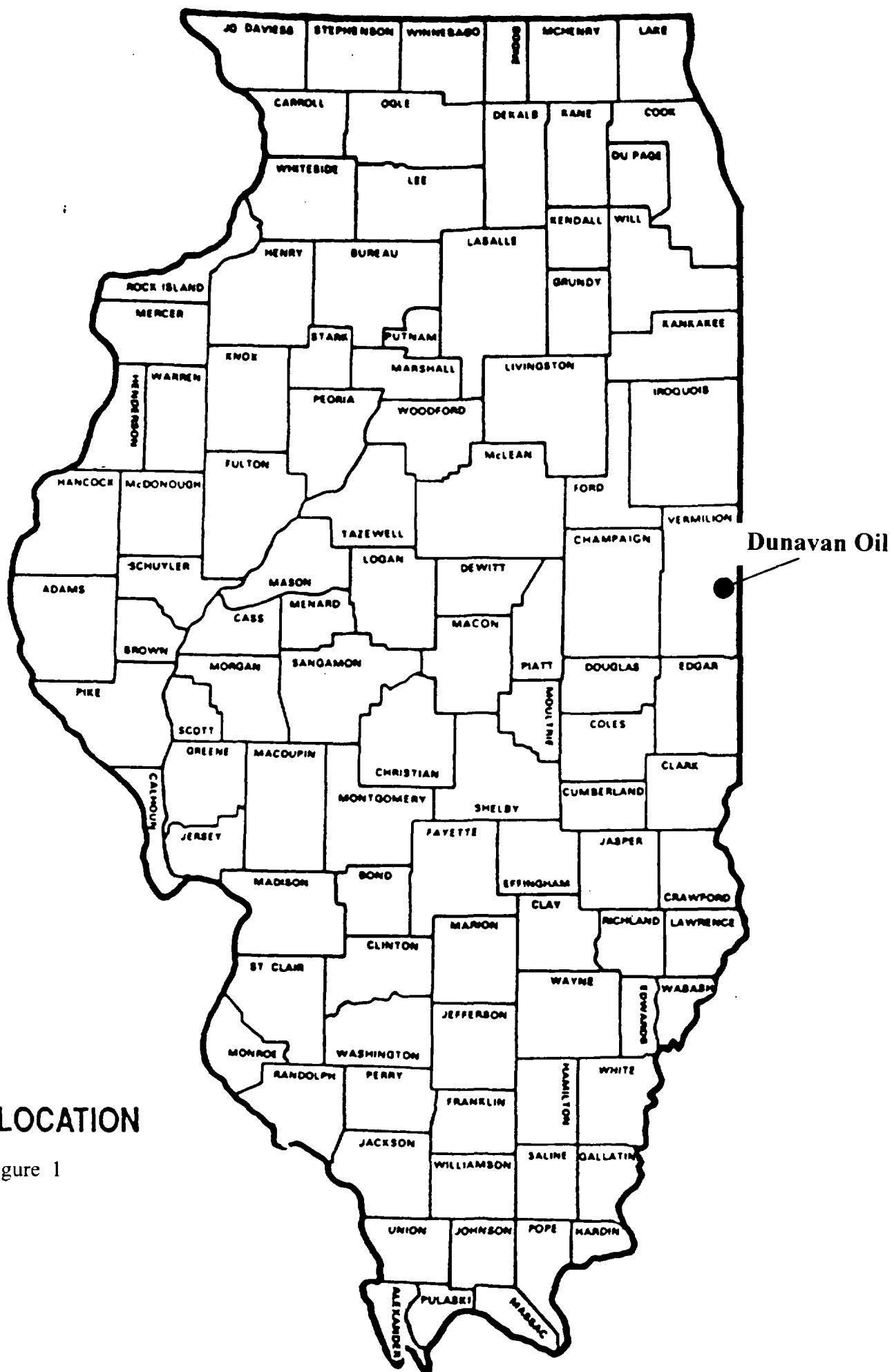
standard. This compound may have been a by-product of chlorination, as the well was relatively new. On May 2, 1994, the U.S. EPA Emergency and Enforcement Response Branch initiated a time critical removal action at the site. This consisted of characterizing tank materials, removing these materials and removing the tanks. These tasks were completed on July 8, 1994. Further remedial work, including soil and groundwater remediation, was postponed until either additional funding became available to perform further remediation or until potential responsible parties (PRP's) were found and agreed to perform the remedial work. The PRP search is ongoing. On March 22 & 23, 1995 a CERCLA STEP investigation was completed by IEPA. During the STEP, soil/sediment and residential drinking water well samples were collected. Detectable concentrations were identified in some of the samples for each media, however, none of these concentrations exceeded CERCLA Removal Action Levels (RAL's) or Maximum Contaminant Levels (MCL's). No persons live on or within 200 feet of contaminated areas nor do persons attend school or daycare within 200 feet of contaminated areas.

On April 11 - 13, 2006 Illinois EPA personnel from the Office of Site Evaluation conducted an ESI at the site and surrounding area and collected eighteen soil samples (includes one duplicate), ten sediment samples (includes one duplicate) and seven drinking water samples (includes one duplicate). Analysis of soil samples collected within the respective horizons indicated a few detectable constituent concentrations, several samples contain one or more constituents at least three times background levels, however none were above SCDM criteria or RAL's. Sediment samples S104 – S108 revealed various levels of several semi-volatile constituents, pesticide constituents, and inorganic constituents. Sample S107 contains one or more constituents at least three times background levels, however none were above SCDM criteria or RAL's. Analytical results from locations S106, S107 and S108 appear to be influenced by the proximity to the former railroad track (see Section 3.2.2 for additional

narrative). Further north (down slope) along the overland flow segment all constituents but one are below detection limits. The analytical results from in-water sediment samples (S101 – S103, S109 and S110) from pond #6 are compared to Ontario Sediment Quality Guidelines and Ecotox (Ecotox) Thresholds. Sediment samples S101 – S103, S109 and S110 revealed various levels of several volatile constituents, semi-volatile constituents, pesticide constituents, PCB's and inorganic constituents. Analysis indicates that the Ontario Guidelines Severe Effect Level for iron and the Ecotox level for lead are exceeded in sample S110. However, this does not reflect attribution to the site as iron and lead were not found in environmentally significant concentrations on the Dunavan site, in any property drainage areas, at the start of the overland drainage way (S107 & S106), nor at its termination at Pond #6 (S103) to warrant a determination that these compounds are attributable to Dunavan Oil. All other constituent concentrations are below respective guidelines and levels.

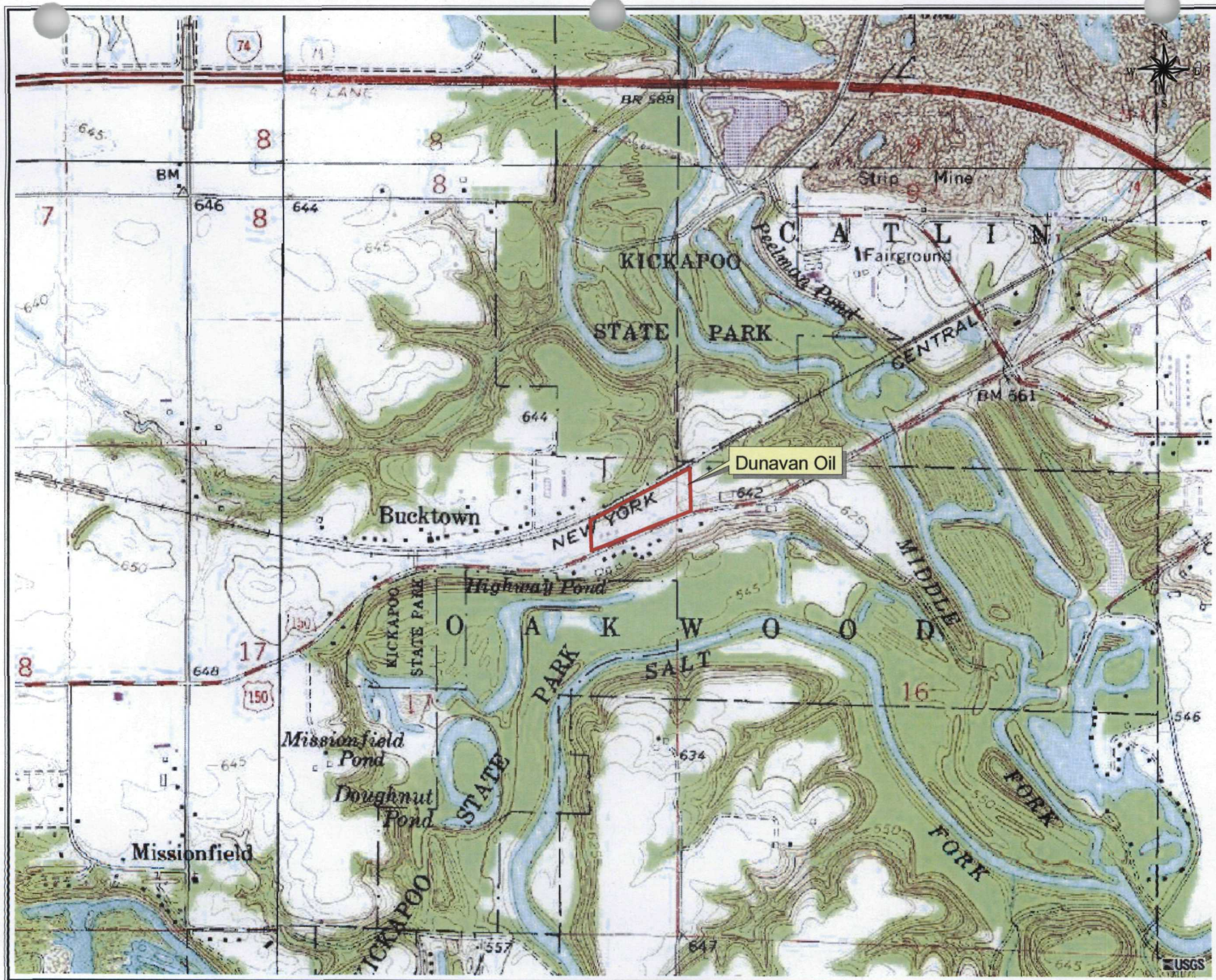
Analysis of drinking water samples indicate a variety of constituents in detectable concentrations, however none are three times background or exceed SCDM criteria, and/or MCL's.

FIGURES AND TABLES



SITE LOCATION

Figure 1



DUNAVAN OIL
Site Topographic Map

FIGURE 2

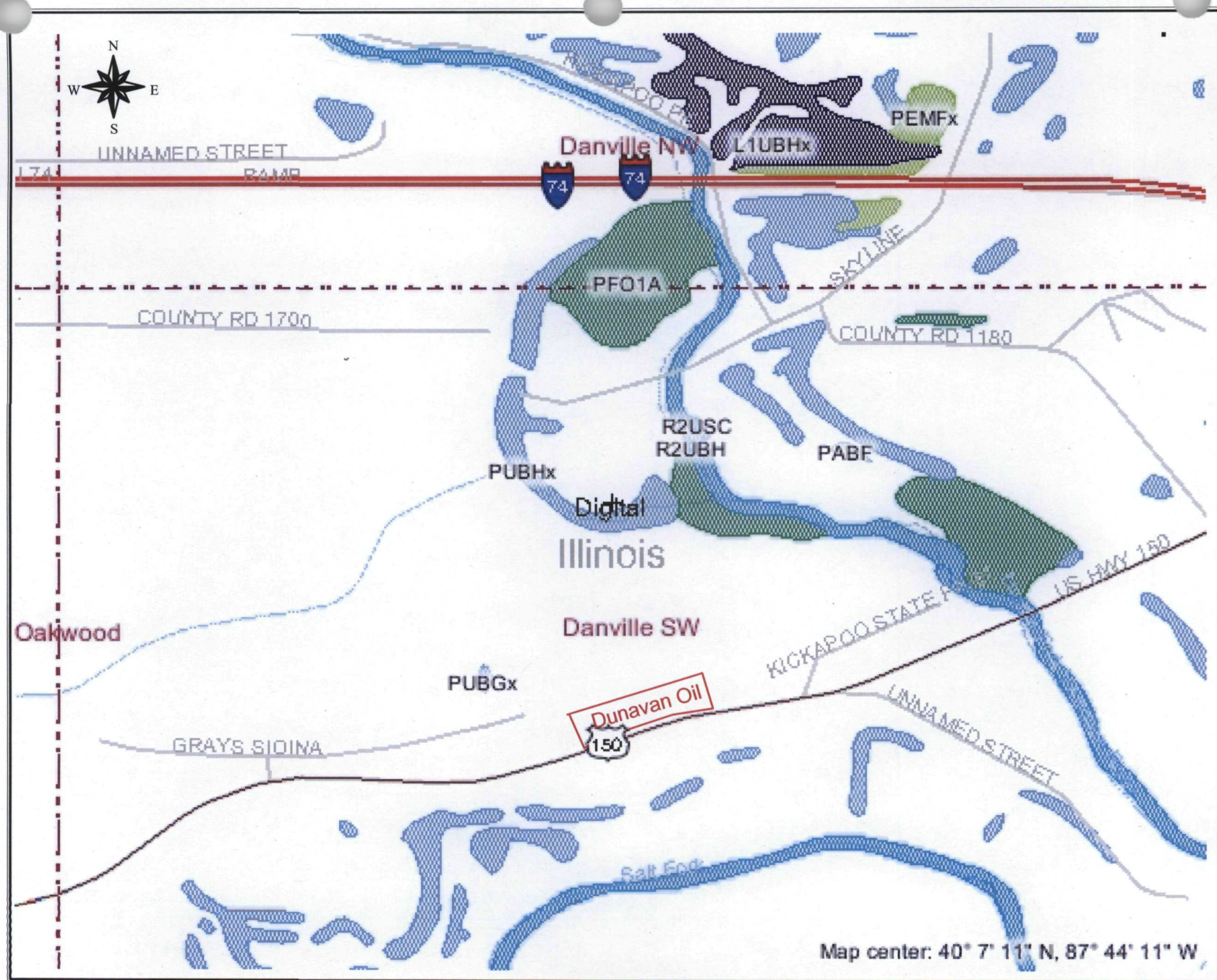


FIGURE 3

DUNAVAN OIL
Wetland Map



DUNAVAN OIL
Site Features Map

FIGURE 4



DUNAVAN OIL
Sample Locations

FIGURE 5



DUNAVAN OIL
Off Site Sample Locations

FIGURE 6



DUNAVAN OIL
Residential Drinking Water Sample Locations

FIGURE 7

DUNAVAN OIL
Oakwood, Illinois

SOIL & SEDIMENT SAMPLE SUMMARY

TABLE 1

Analytical Results (Qualified Data)																						
Case #: 35229		SDG: E0001																				
Site:		DUNAVAN OIL																				
Lab.:		ENVSYS																				
Reviewer:																						
Date:																						
Sample Number:		E0001		E0002		E0003		E0004		E0005		E0006		E0007		E0008		E0009		E0014		
Sampling Location:		X101		X102		X103		X104		X105		X106		X107		X108		X109		X110		
Matrix:		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		
Depth Sampled		4' - 6'		7' - 9'		5' - 7'		6' - 8'		9' - 11'		9' - 11'		9' - 11'		9' - 11'		9' - 11'		16' - 17.5'		
Units:		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		
Date Sampled:		4/11/2006		4/11/2006		4/11/2006		4/11/2006		4/11/2006		4/11/2006		4/11/2006		4/11/2006		4/11/2006		4/12/2006		
Time Sampled:																						
%Moisture:		18		16		18		29		13		27		29		13		28		15		
pH:																						
Dilution Factor:		1.0		1.0		1.0		5.0		1.0		1.0		1.0		1.0		1.0		1.0		
Volatile Compound		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	ResRlt	Flag	ResRlt	Flag	ResRlt	Flag	ResRlt	Flag	
Dichlorodifluoromethane		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Chloromethane		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Vinyl chloride		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Bromomethane		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Chloroethane		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Trichlorofluoromethane		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
1,1-Dichloroethene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
1,1,2-Trichloro-1,2,2-trifluoroethane		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Acetone		4.9	R	8.6	R	9.7	R	24	R	8.6	R	9.9	R	6.7	R	4.3	R	10	R	3.8	R	
Carbon Disulfide		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Methyl acetate		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Methylene chloride		4.9	R	5.1	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
trans-1,2-Dichloroethene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Methyl tert-butyl ether		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
1,1-Dichloroethane		4.9	R	4.3	R	4.9	R	3.8	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
cis-1,2-Dichloroethene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
2-Butanone		9.8	R	8.6	R	9.7	R	4.8	R	8.6	R	9.9	R	12	R	8.4	R	10	R	8.8	R	
Bromochloromethane		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Chloroform		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	2.9	R	4.4	R	
1,1,1-Trichloroethane		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Cyclohexane		18	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Carbon tetrachloride		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Benzene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
1,2-Dichloroethane		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
1,4-Dioxane		98	R	86	R	97	R	310	R	86	R	99	R	120	R	84	R	100	R	88	R	
Trichloroethene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Methylcyclohexane		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
1,2-Dichloropropane		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Bromodichloromethane		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
cis-1,3-Dichloropropene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
4-Methyl-2-pentanone		9.8	R	8.6	R	9.7	R	11	R	8.6	R	9.9	R	12	R	8.4	R	10	R	8.8	R	
Toluene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
trans-1,3-Dichloropropene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
1,1,2-Trichloroethane		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Tetrachloroethene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
2-Hexanone		9.8	R	8.6	R	9.7	R	11	R	8.6	R	9.9	R	12	R	8.4	R	10	R	8.8	R	
Dibromochloromethane		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
1,2-Dibromoethane		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Chlorobenzene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Ethylbenzene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
o-Xylene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
m,p-Xylene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Styrene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Bromoform		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
Isopropylbenzene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
1,1,2,2-Tetrachloroethane		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
1,3-Dichlorobenzene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
1,4-Dichlorobenzene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
1,2-Dichlorobenzene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
1,2-Dibromo-3-chloropropane		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
1,2,4-Trichlorobenzene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	
1,2,3-Trichlorobenzene		4.9	R	4.3	R	4.9	R	5.6	R	4.3	R	5.0	R	6.2	R	4.2	R	5.1	R	4.4	R	

DUNAVAN OIL
Oakwood, Illinois

SOIL & SEDIMENT SAMPLE SUMMARY

TABLE 1

Analytical Results (Qualified Data) Case #: 35229 SDG : E0001 Site : DUNAVAN OIL Lab : ENVSYS Reviewer : Date :															
Sample Number :	U.S. EPA	E0015	E0016	E0017	E0027	E0028		E00M4	E00M5						
Sampling Location :	Removal	X111	X112 (Dup X111)	X113	X114	X115	X116 (Bkgnd)	X117	X118 (Bkgnd)						
Matrix :	Action	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
Depth Sampled :	Levels	15' - 18'	15' - 18'	5' - 7'	7' - 8'	8' - 9'	12" - 18"	0' - 1'	6" - 10"						
Units :	(RAL's)	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg						
Date Sampled :		4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	6/1/2006	6/1/2006						
Time Sampled :	ug/Kg														
%Moisture :		12	8	37	29	12		10	26						
pH :															
Dilution Factor :		1.0	1.0	1.0	1.0	1.0		1.0	1.0						
Volatile Compound		Result	Flag	ResRlt	Flag	ResRlt	Flag	ResRlt	Flag	ResRlt	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
Chloromethane		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
Vinyl chloride		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
Bromomethane		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
Chloroethane		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
Trichlorofluoromethane		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	1.0	J
1,1-Dichloroethene		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
1,1,1,2-Trichloro-1,2,2-trifluoroethane		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
Acetone		5.4	R	5.9	R	53	R	10	R	8.6	R	720	U	13	U
Carbon Disulfide		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
Methyl acetate		4.2	R	3.9	R	13	R	5.6	R	4.3	R	360	U	6.6	U
Methylene chloride		4.2	R	3.9	R	7.2	R	5.6	R	1.7	R	360	U	6.6	U
trans-1,2-Dichloroethene		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
Methyl tert-butyl ether		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
1,1-Dichloroethane		1.7	R	2.1	R	3.0	R	5.6	R	4.3	R	360	U	6.6	U
cis-1,2-Dichloroethane		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
2-Butanone		8.4	R	7.9	R	15	R	11	R	8.6	R	720	U	13	U
Bromochloromethane		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
Chloroform		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
1,1,1-Trichloroethane	720000000	4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	420		6.6	U
Cyclohexane		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
Carbon tetrachloride		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
Benzene		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
1,2-Dichloroethane		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
1,4-Dioxane		84	R	79	R	140	R	210	R	86	R	7200	R	130	R
Trichloroethene		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
Methylcyclohexane		4.2	R	3.9	R	32	R	5.6	R	4.3	R	260	J	6.6	U
1,2-Dichloropropane		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
Bromodichloromethane		4.2	R	3.9	R	7.2	R	13	R	4.3	R	360	U	6.6	U
cis-1,3-Dichloropropene		4.2	R	3.9	R	7.2	R	2.4	R	4.3	R	360	U	6.6	U
4-Methyl-2-pentanone		8.4	R	7.9	R	14	R	11	R	8.6	R	720	U	13	U
Toluene	1000000000	4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	17	J	6.6	U
trans-1,3-Dichloropropene		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
1,1,2-Trichloroethane		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
Tetrachloroethene	11000000	4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	1700		6.6	U
2-Hexanone		8.4	R	7.9	R	14	R	8.4	R	8.6	R	720	U	13	U
Dibromochloromethane		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
1,2-Dibromoethane		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
Chlorobenzene		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
Ethylbenzene	1000000000	4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	15	J	6.6	U
o-Xylene	1000000000	4.2	R	3.9	R	3.3	R	5.6	R	4.3	R	34	J	6.6	U
m,p-Xylene	1000000000	4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	60	J	6.6	U
Styrene		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
Bromoform		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
Isopropylbenzene		4.2	R	3.9	R	7.3	R	5.6	R	4.3	R	27	J	6.6	U
1,1,2,2-Tetrachloroethane		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
1,3-Dichlorobenzene		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
1,4-Dichlorobenzene		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
1,2-Dichlorobenzene		4.2	R	3.9	R	12	R	5.6	R	4.3	R	360	U	6.6	U
1,2-Dibromo-3-chloropropane		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
1,2,4-Trichlorobenzene		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U
1,2,3-Trichlorobenzene		4.2	R	3.9	R	7.2	R	5.6	R	4.3	R	360	U	6.6	U

-- No applicable RAL's

Values highlighted in GREEN exceed background detection limits, are three times background, or ten times "J" background concentrations.

DUNAVAN OIL
Oakwood, Illinois

SOIL & SEDIMENT SAMPLE SUMMARY

TABLE 1

Analytical Results (Qualified Data)

Case #: 35229 SDG: E0001
Site: DUNAVAN OIL
Lab.: ENVSYS
Reviewer:
Date:

Sample Number :	U.S. EPA Removal Action Levels (RAL's)	E0001 X101 Soil 4' - 6' ug/Kg 4/11/2006	E0002 X102 Soil 7' - 9' ug/Kg 4/11/2006	E0003 X103 Soil 5' - 7' ug/Kg 4/11/2006	E0004 X104 Soil 6' - 8' ug/Kg 4/11/2006	E0005 X105 Soil 9' - 11' ug/Kg 4/11/2006	E0006 X106 Soil 9' - 11' ug/Kg 4/11/2006	E0007 X107 Soil 9' - 11' ug/Kg 4/11/2006	E0008 X108 Soil 9' - 11' ug/Kg 4/11/2006	E0009 X109 Soil 9' - 11' ug/Kg 4/11/2006	E0014 X110 Soil 16' - 17.5' ug/Kg 4/12/2006										
Sampling Location :																					
Matrix :																					
Depth Sampled :																					
Units :																					
Date Sampled :																					
Time Sampled :	ug/Kg																				
%Moisture :		18	16	18	29	13	27	29	13	28	15										
pH :		6.9	9.1	7.4	7.3	8.9	9.0	7.7	8.5		7.1										
Dilution Factor :		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0										
Semivolatile Compound		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag		
Benzaldehyde	1000000000	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U
Phenol		410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U
Bis(2-Chloroethyl)ether		410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U
2-Chlorophenol		410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U
2-Methylphenol		410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U
2,2'-Oxybis(1-chloropropane)		410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U
Acetophenone		410	U	40	J	410	U	480	U	390	U	48	J	480	U	390	U	470	U	48	J
4-Methylphenol		410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U
N-Nitroso-di-n-propylamine		410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U
Hexachloroethane		410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U
Nitrobenzene	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
Isophorone	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
2-Nitrophenol	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
2,4-Dimethylphenol	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
Bis(2-chloroethoxy)methane	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
2,4-Dichlorophenol	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
Naphthalene	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
4-Chloroaniline	410	U	400	U	410	U	480	R	390	U	470	U	480	U	390	U	470	U	400	U	
Hexachlorobutadiene	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
Caprolactam	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
4-Chloro-3-methylphenol	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
2-Methylnaphthalene	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
Hexachlorocyclopentadiene	410	U	400	U	410	U	480	R	390	U	470	U	480	U	390	U	470	U	400	U	
2,4,6-Trichlorophenol	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
2,4,5-Trichlorophenol	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
1,1'-Biphenyl	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
2-Chloronaphthalene	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
2-Nitroaniline	800	U	790	U	800	U	930	U	760	U	900	U	930	U	760	U	920	U	780	U	
Dimethylphthalate	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
2,6-Dinitrotoluene	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
Acenaphthylene	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
3-Nitroaniline	800	U	790	U	800	U	930	U	760	U	900	U	930	U	760	U	920	U	780	U	
Acenaphthene	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
2,4-Dinitrophenol	800	U	790	U	800	U	930	U	760	U	900	U	930	U	760	U	920	U	780	U	
4-Nitrophenol	800	U	790	U	800	U	930	U	760	U	900	U	930	U	760	U	920	U	780	U	
Dibenzofuran	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
2,4-Dinitrotoluene	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
Diethylphthalate	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
Fluorene	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
4-Chlorophenyl-phenylether	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
4-Nitroaniline	800	U	790	U	800	U	930	U	760	U	900	U	930	U	760	U	920	U	780	U	
4,6-Dinitro-2-methylphenol	800	U	790	U	800	U	930	U	760	U	900	U	930	U	760	U	920	U	780	U	
N-Nitrosodiphenylamine	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
1,2,4,5-Tetrachlorobenzene	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
4-Bromophenyl-phenylether	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
Hexachlorobenzene	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
Atrazine	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
Pentachlorophenol	800	R	790	R	800	R	930	R	760	R	900	R	930	R	760	R	920	R	780	R	
Phenanthrene	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
Anthracene	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
Carbazole	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
Di-n-butylphthalate	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
Fluoranthene	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
Pyrene	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
Butylbenzylphthalate	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
3,3'-Dichlorobenzidine	410	U	400	U	410	U	480	R	390	U	470	U	480	U	390	U	470	U	400	U	
Benzo(a)anthracene	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	U	400	U	
Chrysene	410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U</					

Cells highlighted in GREEN exceed background detection limits, are three times background, or ten times "J" background concentrations.

DUNAVAN OIL
Oakwood, Illinois

SOIL & SEDIMENT SAMPLE SUMMARY

TABLE 1

Analytical Results (Qualified Data)																
Case #: 35229		SDG : E0001														
Site:		DUNAVAN OIL														
Lab.:		ENVSYS														
Reviewer:																
Date:																
Sample Number :	U.S. EPA	E0015	E0016	E0017	E0027	E0028	E0032	E0033	E0034							
Sampling Location :	Removal	X111	X112 (Dup X111)	X113	X114	X115	X116 (Bkgnd)	X117	X118 (Bkgnd)							
Matrix :	Action	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil							
Depth Sampled	Levels	15' - 18'	15' - 18'	5' - 7'	7' - 8'	8' - 9'	12" - 18"	0' - 1'	6" - 10"							
Units :	(RAL's)	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg							
Date Sampled :		4/11/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/13/2006	4/6/2006	4/13/2006							
Time Sampled :																
%Moisture :	ug/Kg	12	8	37	29	12	14	39	30							
pH :		8.2	8.7	7.8	8.3	8.5	8.6	7.9	8.3							
Dilution Factor :		1.0	1.0	5.0	1.0	1.0	1.0	1.0	1.0							
Semivolatile Compound		Result	Flag	Result	Flag	Result	Flag	Result	Flag							
Benzaldehyde	1000000000	390 U		370 U		2700 U		480 U								
Phenol	1000000000	390 U		370 U		2700 U		480 U								
Bis(2-Chloroethyl)ether		390 U		370 U		2700 U		480 U								
2-Chlorophenol		390 U		370 U		2700 U		480 U								
2-Methylphenol		390 U		370 U		2700 U		480 U								
2,2'-Oxybis(1-chloropropane)		390 U		370 U		2700 U		480 U								
Acetophenone	1000000000	45 J		61 J		2700 U		480 U								
4-Methylphenol		390 U		370 U		2700 U		480 U								
N-Nitroso-di-n-propylamine		390 U		370 U		2700 U		480 U								
Hexachloroethane		390 U		370 U		2700 U		480 U								
Nitrobenzene		390 U		370 U		2700 U		480 U								
Isophorone	6000000000	390 U		370 U		2700 U		480 U								
2-Nitrophenol		390 U		370 U		2700 U		480 U								
2,4-Dimethylphenol		390 U		370 U		2700 U		480 U								
Bis(2-chloroethoxy)methane		390 U		370 U		2700 U		480 U								
2,4-Dichlorophenol		390 U		370 U		2700 U		480 U								
Naphthalene	8200000000	390 U		370 U		290 J		480 U								
4-Chloroaniline		390 R		370 U		2700 U		480 U								
Hexachlorobutadiene		390 U		370 U		2700 U		480 U								
Caprolactam		390 U		370 U		2700 U		480 U								
4-Chloro-3-methylphenol		390 U		370 U		2700 U		480 U								
2-Methylnaphthalene	--	390 U		370 U		890 J		480 U								
Hexachlorocyclopentadiene		390 R		370 U		2700 U		480 U								
2,4,6-Trichlorophenol		390 U		370 U		2700 U		480 U								
2,4,5-Trichlorophenol		390 U		370 U		2700 U		480 U								
1,1'-Biphenyl	10000000000	390 U		370 U		2700 U		480 U								
2-Chloronaphthalene		390 U		370 U		2700 U		480 U								
2-Nitroaniline		750 U		720 U		5200 U		930 U								
Dimethylphthalate		390 U		370 U		2700 U		480 U								
2,6-Dinitrotoluene		390 U		370 U		2700 U		480 U								
Acenaphthylene		390 U		370 U		2700 U		480 U								
3-Nitroaniline		750 U		720 U		5200 U		930 U								
Acenaphthene		390 U		370 U		2700 U		480 U								
2,4-Dinitrophenol		750 U		720 U		5200 U		930 U								
4-Nitrophenol		750 U		720 U		5200 U		930 U								
Dibenzofuran	820000000	390 U		370 U		2700 U		480 U								
2,4-Dinitrotoluene		390 U		370 U		2700 U		480 U								
Diethylphthalate	10000000000	390 U		370 U		2700 U		480 U								
Fluorene	8200000000	390 U		370 U		330 J		480 U								
4-Chlorophenyl-phenylether		390 U		370 U		2700 U		480 U								
4-Nitroaniline		750 U		720 U		5200 U		930 U								
4,6-Dinitro-2-methylphenol		750 U		720 U		5200 U		930 U								
N-Nitrosodiphenylamine		390 U		370 U		2700 U		480 U								
1,2,4,5-Tetrachlorobenzene		390 U		370 U		2700 U		480 U								
4-Bromophenyl-phenylether		390 U		370 U		2700 U		480 U								
Hexachlorobenzene		390 U		370 U		2700 U		480 U								
Atrazine		390 U		370 U		2700 U		480 U								
Pentachlorophenol		750 R		720 R		5200 R		930 R								
Phenanthrene	10000000000	390 U		370 U		870 J		480 U								
Anthracene	10000000000	390 U		370 U		2700 U		480 U								
Carbazole		390 U		370 U		2700 U		480 U								
Di-n-butylphthalate	10000000000	390 U		370 U		2700 U		480 U								
Fluoranthene	8200000000	390 U		370 U		800 J		480 U								
Pyrene	8100000000	390 U		370 U		620 J		480 U								
Butylbenzylphthalate		390 U		370 U		2700 U		480 U								
3,3'-Dichlorobenzidine		390 R		370 UJ		2700 U		480 UJ								
Benzo(a)anthracene	780000	390 U		370 U		420 J		480 U								
Chrysene	780000000	390 U		370 U		480 J		480 U								
Bis(2-ethylhexyl)phthalate	41000000	390 U		370 U		750 J		480 U								
Di-n-octylphthalate		390 U		370 U		2700 U		480 U								
Benzo(b)fluoranthene	780000	390 U		370 U		700 J		480 U								
Benzo(k)fluoranthene	78000000	390 U		370 U		690 J		480 U								
Benzo(a)pyrene	78000	390 U		370 U		680 J		480 U								
Indeno(1,2,3-cd)pyrene	780000	390 U		370 U		2700 U		480 U								
Dibenzo(a,h)anthracene		390 U		370 U		2700 U		480 U								
Benzo(g,h,i)perylene		390 U		370 U		2700 U		480 U								
2,3,4,6-Tetrachlorophenol		390 U		370 U		2700 U		480 U								

-- No RAL's, guidelines or thresholds available.

Cells highlighted in GREEN exceed background detection limits, are three times background, or ten times "J" background concentrations.

DUNAVAN OIL
Oakwood, Illinois

SOIL & SEDIMENT SAMPLE SUMMARY

TABLE 1

Analytical Results (Qualified Data) Case #: 35229 SDG : E0002 Site : DUNAVAN OIL Lab. : ENVSYS Reviewer : Date :																			
Sample Number :	U.S. EPA	E0001	E0002	E0003	E0004	E0005	E0006	E0007	E0008	E0009	E0014								
Sampling Location :	Removal	X101	X102	X103	X104	X105	X106	X107	X108	X109	X110								
Matrix :	Action	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil								
Depth Sampled	Levels	4' - 6'	7' - 9'	5' - 7'	6' - 8'	9' - 11'	9' - 11'	9' - 11'	9' - 11'	9' - 11'	16' - 17.5'								
Units :	(RAL's)	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg								
Date Sampled :		4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/5/2006								
Time Sampled :	ug/Kg																		
%Moisture :		18	16	18	29	13	27	29	13	28	15								
pH :																			
Dilution Factor :		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0								
Pesticide Compound		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	320000	4.1	UJ	4.0	UJ	4.1	UJ	4.8	UJ	3.9	UJ	4.7	UJ	4.8	UJ	3.9	UJ	4.7	R
beta-BHC		4.1	UJ	0.75	J	4.1	UJ	4.8	UJ	3.9	UJ	4.7	UJ	0.89	J	3.9	UJ	4.7	R
delta-BHC		4.1	UJ	4.0	UJ	4.1	UJ	4.8	UJ	3.9	UJ	4.7	UJ	4.8	UJ	3.9	UJ	4.7	R
gamma-BHC (Lindane)		4.1	UJ	4.0	UJ	4.1	UJ	4.8	UJ	3.9	UJ	4.7	UJ	4.8	UJ	3.9	UJ	4.7	R
Heptachlor		4.1	U	4.0	U	4.1	U	4.8	U	3.9	U	4.7	U	4.8	U	3.9	U	4.7	R
Aldrin		4.1	U	4.0	U	4.1	U	4.8	U	3.9	U	4.7	U	4.8	U	3.9	U	4.7	R
Heptachlor epoxide		4.1	UJ	4.0	UJ	4.1	UJ	4.8	UJ	3.9	UJ	4.7	UJ	4.8	UJ	3.9	UJ	4.7	R
Endosulfan I		4.1	U	4.0	U	4.1	U	4.8	U	3.9	U	4.7	U	4.8	U	3.9	U	4.7	R
Dieldrin		8.0	U	7.9	U	8.0	U	9.3	U	7.6	U	9.0	U	9.3	U	7.6	U	9.2	R
4,4'-DDE		8.0	U	7.9	U	8.0	U	9.3	U	7.6	U	9.0	U	9.3	U	7.6	U	9.2	R
Endrin		8.0	U	7.9	U	8.0	U	9.3	U	7.6	U	9.0	U	9.3	U	7.6	U	9.2	R
Endosulfan II		8.0	U	7.9	U	8.0	U	9.3	U	7.6	U	9.0	U	9.3	U	7.6	U	9.2	R
4,4'-DDD		8.0	U	7.9	U	8.0	U	9.3	U	7.6	U	9.0	U	9.3	U	7.6	U	9.2	R
Endosulfan sulfate		8.0	U	7.9	U	8.0	U	9.3	U	7.6	U	9.0	U	9.3	U	7.6	U	9.2	R
4,4'-DDT		8.0	U	7.9	U	8.0	U	9.3	U	7.6	U	9.0	U	9.3	U	7.6	U	9.2	R
Methoxychlor		41	U	40	U	41	U	48	U	39	U	47	U	48	U	39	U	47	R
Endrin ketone		8.0	UJ	7.9	UJ	8.0	UJ	9.3	UJ	7.6	UJ	9.0	UJ	9.3	UJ	7.6	UJ	9.2	R
Endrin aldehyde		8.0	U	7.9	U	8.0	U	9.3	U	7.6	U	9.0	U	9.3	U	7.6	U	9.2	R
alpha-Chlordane		4.1	U	4.0	U	4.1	U	4.8	U	3.9	U	4.7	U	4.8	U	3.9	U	4.7	R
gamma-Chlordane		4.1	U	4.0	U	4.1	U	4.8	U	3.9	U	4.7	U	4.8	U	3.9	U	4.7	R
Toxaphene		410	U	400	U	410	U	480	U	390	U	470	U	480	U	390	U	470	R

Cells highlighted in GREEN exceed overland flow segment background detection limits, are three times background, or ten times "J" background concentrations.

DUNAVAN OIL
Oakwood, Illinois

SOIL & SEDIMENT SAMPLE SUMMARY

TABLE 1

Analytical Results (Qualified Data)																	
Case #: 35229		SDG : E0033, E0002															
Site :		DUNAVAN OIL															
Lab. :		ENVSYS															
Reviewer :																	
Date :																	
Sample Number :	U.S. EPA	E0015		E0016		E0017		E0027		E0028		E0032		E0033		E0034	
Sampling Location :	Removal	X111		X112 (Dup X111		X113		X114		X115		X116 (Bkgnd)		X117		X118 (Bkgnd)	
Matrix :	Action	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Depth Sampled	Levels	15' - 18'		15' - 18'		5' - 7'		7' - 8'		8' - 9'		12" - 18"		0' - 1'		6" - 10"	
Units :	(RAL's)	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		4/11/2006		4/12/2006		4/12/2006		4/12/2006		4/12/2006		4/13/2006		4/6/2006		4/13/2006	
Time Sampled :	ug/Kg																
%Moisture :		12		8		37		29		12		14		39		30	
pH :												8.6		7.9		8.3	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Pesticide Compound		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC		3.9	UJ	3.7	UJ	5.4	UJ	4.8	UJ	3.9	UJ	2	UJ	2.8	UJ	2.4	UJ
beta-BHC		3.9	UJ	3.7	UJ	5.4	UJ	4.8	UJ	3.9	UJ	2	UJ	2.8	UJ	2.4	UJ
delta-BHC		3.9	UJ	3.7	UJ	5.4	UJ	4.8	UJ	3.9	UJ	2	U	2.8	U	2.4	U
gamma-BHC (Lindane)	440000	3.9	UJ	3.7	UJ	5.4	UJ	4.8	R	3.9	UJ	2	UJ	1	J	2.4	UJ
Heptachlor		3.9	U	3.7	U	5.4	U	4.8	R	3.9	U	2	UJ	2.8	UJ	2.4	UJ
Aldrin		3.9	U	3.7	U	5.4	U	4.8	R	3.9	U	2	UJ	2.8	UJ	2.4	UJ
Heptachlor epoxide	63000	3.9	U	3.7	U	5.4	U	4.8	U	3.9	U	2	U	45	J	2.4	U
Endosulfan I	120000000	3.9	U	3.7	U	5.4	U	4.8	U	3.9	U	2	U	17	J	0.78	J
Dieldrin	36000	7.5	U	7.2	U	1.7	J	9.3	U	7.5	U	3.8	U	5.4	U	4.7	U
4,4'-DDE	1700000	7.5	U	7.2	U	10	U	9.3	U	7.5	U	3.8	U	67	J	0.67	J
Endrin	6100000	7.5	UJ	7.2	UJ	10	UJ	9.3	UJ	7.5	UJ	3.8	U	61	J	4.7	U
Endosulfan II	120000000	7.5	UJ	7.2	UJ	10	UJ	9.3	UJ	7.5	UJ	3.8	U	57	J	1.2	J
4,4'-DDD	2400000	7.5	U	7.2	U	1.6	J	9.3	U	7.5	U	3.8	U	5.4	U	4.7	U
Endosulfan sulfate	--	7.5	U	7.2	U	2.34	J	9.3	U	7.5	U	3.8	U	5.4	U	4.7	U
4,4'-DDT	1700000	7.5	UJ	7.2	UJ	1.5	J	9.3	UJ	7.5	UJ	3.8	U	5.4	U	1.2	J
Methoxychlor		39	UJ	37	UJ	54	UJ	48	UJ	39	UJ	20	UJ	28	UJ	24	UJ
Endrin ketone	--	7.5	U	7.2	U	10	U	9.3	U	7.5	U	3.8	U	170	J	4.7	U
Endrin aldehyde	--	7.5	UJ	7.2	UJ	1.29	J	9.3	UJ	7.5	UJ	3.8	U	5.4	U	4.7	U
alpha-Chlordane	440000	3.9	U	3.7	U	5.4	U	4.8	U	3.9	U	2	U	1.1	J	2.4	U
gamma-Chlordane	440000	3.9	UJ	3.7	UJ	0.97	J	4.8	UJ	3.9	UJ	2	U	54	J	2.4	U
Toxaphene		390	U	370	U	540	U	480	U	390	U	200	U	280	U	240	U

-- No applicable RAL's available.

Cells highlighted in **GREEN** exceed background detection limits, are three times background, or ten times "J" background concentrations.

DUNAVAN OIL
Oakwood, Illinois

SOIL & SEDIMENT SAMPLE SUMMARY

TABLE 1

Analytical Results (Qualified Data) Case #: 35229 SDG : E0002 Site : DUNAVAN OIL Lab. : ENVSYS Reviewer : Date :																				
Sample Number :	E0001		E0002		E0003		E0004		E0005		E0006		E0007		E0008		E0009		E0014	
Sampling Location :	X101		X102		X103		X104		X105		X106		X107		X108		X109		X110	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Depth Sampled	4' - 6'		7' - 9'		5' - 7'		6' - 8'		9' - 11'		9' - 11'		9' - 11'		9' - 11'		9' - 11'		16' - 17.5'	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	4/11/2006		4/11/2006		4/11/2006		4/11/2006		4/11/2006		4/11/2006		4/11/2006		4/11/2006		4/11/2006		4/5/2006	
Time Sampled :																				
%Moisture :	18		16		18		29		13		27		29		13		28		15	
pH :	6.9		9.1		7.4		7.3		8.9		9.0		7.7		8.5		8.5		7.1	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Aroclor-1016	40	U	39	U	40	U	46	U	38	U	45	U	46	U	38	U	46	U	39	U
Aroclor-1221	40	U	39	U	40	U	46	U	38	U	45	U	46	U	38	U	46	U	39	U
Aroclor-1232	40	U	39	U	40	U	46	U	38	U	45	U	46	U	38	U	46	U	39	U
Aroclor-1242	40	U	39	U	40	U	46	U	38	U	45	U	46	U	38	U	46	U	39	U
Aroclor-1248	40	U	39	U	40	U	46	U	38	U	45	U	46	U	38	U	46	U	39	U
Aroclor-1254	40	U	39	U	40	U	46	U	38	U	45	U	46	U	38	U	46	U	39	U
Aroclor-1260	40	UJ	39	UJ	40	UJ	46	UJ	38	UJ	45	UJ	46	UJ	38	UJ	46	UJ	39	UJ
Aroclor-1262	40	U	39	U	40	U	46	U	38	U	45	U	46	U	38	U	46	U	39	U
Aroclor-1268	40	UJ	39	UJ	40	UJ	46	UJ	38	UJ	45	UJ	46	UJ	38	UJ	46	UJ	39	UJ

DUNAVAN OIL
Oakwood, Illinois

SOIL & SEDIMENT SAMPLE SUMMARY

TABLE 1

Analytical Results (Qualified Data)																	
Case #: 35229		SDG : E0033, E0002															
Site :		DUNAVAN OIL															
Lab. :		ENVSYS															
Reviewer :																	
Date :																	
Sample Number :		E0015		E0016		E0017		E0027		E0028		E0032		E0033		E0034	
Sampling Location :		X111		X112 (Dup X111)		X113		X114		X115		X116 (Bkgnd)		X117		X118 (Bkgnd)	
Matrix :		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Depth Sampled		15' - 18'		15' - 18'		5' - 7'		7' - 8'		8' - 9'		12" - 18"		0' - 1'		6" - 10"	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		4/11/2006		4/12/2006		4/12/2006		4/12/2006		4/12/2006		4/13/2006		4/6/2006		4/13/2006	
Time Sampled :																	
%Moisture :		12		8		37		29		12		14		39		30	
pH :		8.2		8.7		7.8		8.3		8.5		8.6		7.9		8.3	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
ANALYTE		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Aroclor-1016		38	U	36	R	52	U	46	U	38	U	38	UJ	54	UJ	47	UJ
Aroclor-1221		38	U	36	U	52	U	46	U	38	U	38	U	54	U	47	U
Aroclor-1232		38	U	36	U	52	U	46	U	38	U	38	U	54	U	47	U
Aroclor-1242		38	U	36	U	52	U	46	U	38	U	38	U	54	U	47	U
Aroclor-1248		38	U	36	U	52	U	46	U	38	U	38	U	54	U	47	U
Aroclor-1254		38	U	36	U	52	U	46	U	38	U	38	U	54	U	47	U
Aroclor-1260		38	UJ	36	R	52	UJ	46	UJ	38	UJ	38	UJ	54	UJ	47	UJ
Aroclor-1262		38	U	36	U	52	U	46	U	38	U	38	U	54	U	47	U
Aroclor-1268		38	UJ	36	UJ	52	UJ	46	UJ	38	UJ	38	U	54	U	47	U

DUNAVAN OIL
Oakwood, Illinois

SOIL & SEDIMENT SAMPLE SUMMARY

TABLE 1

Analytical Results (Qualified Data)																						
Case #: 35229		SDG : ME0001																				
Site :		DUNAVAN OIL																				
Lab. :		SENTIN																				
Reviewer :		J. GANZ																				
Date :		MAY 31, 2006																				
Sample Number :		U.S. EPA	ME0001	ME0002	ME0003	ME0004	ME0005	ME0006	ME0007	ME0008	ME0009	ME0014										
Sampling Location :		Removal	X101	X102	X103	X104	X105	X106	X107	X108	X109	X110										
Matrix :		Action	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil										
Depth Sampled		Levels	4' - 6'	7' - 9'	5' - 7'	6' - 8'	9' - 11'	9' - 11'	9' - 11'	9' - 11'	9' - 11'	16' - 17.5'										
Units :		(RAL's)	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg										
Date Sampled :			4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/11/2006	4/5/2006										
Time Sampled :		mg/Kg	08:45	10:00	10:50	11:35	12:15	13:10	14:00	15:05	15:40	08:50										
%Solids :			80.8	88.4	84.4	85.0	88.8	88.5	86.1	86.9	84.7	85.0										
Dilution Factor :			1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0										
ANALYTE			Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag				
ALUMINUM		1000000	5890		3110		6930		5450		3040		3440		3420		3580		4880		3920	J
ANTIMONY		8200	7.4	UJ	6.8	UJ	7.1	UJ	7.1	UJ	6.8	UJ	0.53	J	7.0	UJ	0.48	J	7.1	UJ	7.1	UJ
ARSENIC		6100	3.2	J	3.6	J	2.4	J	3.5	J	4.1	J	3.4	J	3.4	J	3.8	J	3.9	J	2.7	J
BARIUM		1000000	38.8	J	16.3	J	789	J	47.0	J	14.5	J	11.9	J	21.0	J	21.9	J	17.2	J	24.6	J
BERYLLIUM		130	0.62	UJ	0.57	UJ	0.59	UJ	0.59	UJ	0.56	UJ	0.56	UJ	0.58	UJ	0.58	UJ	0.59	UJ	0.59	UJ
CADMIUM		10000	0.62	UJ	0.072	J	0.59	UJ	0.59	UJ	0.56	UJ	0.56	UJ	0.58	J	0.58	UJ	0.59	UJ	0.59	J
CALCIUM		--	24500	J	43100	J	1840	J	1390	J	43200	J	36100	J	24900	J	25700	J	64100	J	19600	J
CHROMIUM		1000000	9.1	J	6.1	J	11.9	J	8.7	J	6.0	J	6.6	J	6.1	J	7.0	J	8.6	J	7.4	J
COBALT		1000000	5.1	J	4.8	J	6.9	J	2.5	J	4.4	J	5.1	J	12.8	J	5.0	J	5.8	J	21.2	J
COPPER		820000	9.5	J	10.6	J	11.8	J	10.0	J	11.9	J	9.9	J	9.1	J	10.4	J	19.9	J	8.5	J
IRON		1000000	11200	J	9820	J	10400	J	9590	J	9650	J	9520	J	19200	J	9890	J	14200	J	16000	J
LEAD		1000	5.6	J-	10.6	J	6.8	J-	4.8	J-	7.7	J-	6.5	J-	5.9	J-	6.9	J-	5.6	J-	6.8	J-
MAGNESIUM		--	17000	J	17000	J	2440	J	1280	J	20900	J	17700	J	12700	J	13000	J	22700	J	11100	J
MANGANESE		470000	434	J	401	J	355	J	97.3	J	345	J	304	J	999	J	307	J	346	J	7370	J
MERCURY		6100	0.12	U	0.11	U	0.12	U	0.12	U	0.11	U	0.11	U	0.12	U	0.12	U	0.12	U	0.12	U
NICKEL		410000	15.9	J	13.0	J	15.6	J	9.8	J	11.2	J	11.6	J	16.8	J	11.8	J	14.8	J	27.1	J
POTASSIUM		--	1130		742		851		402	J	665		766		666		762		1040		781	J
SELENIUM		100000	4.3	UJ	4.0	UJ	0.45	J	0.45	J	0.48	J	4.0	UJ	0.58	J	4.0	UJ	4.1	UJ	4.1	UJ
SILVER		100000	1.2	UJ	1.1	UJ	1.2	UJ	1.2	UJ	1.1	UJ	1.1	UJ	1.2	UJ	1.2	UJ	1.2	UJ	1.2	UJ
SODIUM		--	243	J	236	J	262	J	295	J	261	J	217	J	314	J	239	J	251	J	241	J
THALLIUM		--	3.1	UJ	2.8	UJ	3.0	UJ	2.9	UJ	2.8	UJ	2.8	UJ	2.9	UJ	2.9	UJ	3.0	UJ	2.9	UJ
VANADIUM		140000	12.4	J	6.0	J	12.7	J	10.4	J	6.1	J	6.4	J	5.9	J	8.4	J	13.0	J	7.2	J
ZINC		1000000	26.4	J-	35.9	J	24.9	J-	29.4	J	38.8	J	30.3	J	61.3	J	34.2	J	36.5	J	46.7	J
CYANIDE		1000000	3.1	U	2.8	U	3.0	U	2.9	U	2.8	U	2.8	U	2.9	U	2.9	U	3.0	U	2.9	R

-- No applicable RAL's available.

Values highlighted in GREEN exceed background detection limits, are three times background, or ten times "J" background concentrations.

DUNAVAN OIL
Oakwood, Illinois

SOIL & SEDIMENT SAMPLE SUMMARY

TABLE 1

Analytical Results (Qualified Data)																	
Case #: 35229		SDG : ME0028															
Site :		DUNAVAN OIL															
Lab. :		SENTIN															
Reviewer :		S. CONNET															
Date :		06/05/06															
Sample Number :	U.S. EPA	ME0015	ME0016	ME0017	ME0027	ME0028	ME0032	ME0033	ME0034								
Sampling Location :	Removal	X111	X112 (Dup X111)	X113	X114	X115	X116 (Bkgnd)	X117	X118 (Bkgnd)								
Matrix :	Action	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil								
Depth Sampled	Levels	15' - 18'	15' - 18'	5' - 7'	7' - 8'	8' - 9'	12" - 18"	0' - 1'	6" - 10"								
Units :	(RAL's)	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg								
Date Sampled :		4/5/2006	4/12/2006	4/12/2006	4/12/2006	4/12/2006	4/13/2006	4/13/2006	4/13/2006								
Time Sampled :	mg/Kg	09:50	09:50	10:40	13:55	16:55	08:30	08:45	09:00								
%Solids :		88.4	89.0	78.8	85.4	87.2	86.8	67.4	57.3								
Dilution Factor :		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0								
ANALYTE		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	1000000	3290		4000		4230		3210		5030		5270		3980		7580	
ANTIMONY	8200	6.8	UJ	0.50	J	7.6	UJ	0.45	J	6.9	UJ	6.9	UJ	4.2	J	1.3	J
ARSENIC	6100	3.0	J	4.1	J	2.4	J	3.0	J	4.1		6.0		6.2		31.9	
BARIUM	1000000	14.2	J	24.4	J	98.3	J	16.0	J	15.0	J	24.2		204		125	
BERYLLIUM	130	0.57	UJ	0.56	UJ	0.63	UJ	0.59	UJ	0.57	UJ	0.58	UJ	0.74	UJ	1.0	
CADMIUM	10000	0.57	UJ	0.56	UJ	0.63	UJ	0.59	UJ	0.081	J	0.11	J	1.7		0.68	J
CALCIUM	--	35100	J	59800	J	2990	J	29500	J	50900		39400		10900		38700	
CHROMIUM	1000000	6.3	J	9.0	J	6.1	J	6.1	J	9.6		9.4		962		12.2	
COBALT	1000000	4.3	J	5.6	J	7.1	J	4.3	J	5.7	U	5.8	U	17.3		8.7	U
COPPER	820000	10.0	J	12.8	J	7.9	J	9.7	J	11.0	J-	14.0	J-	217		34.7	
IRON	1000000	9260	J	11600	J	7800	J	8590	J	13000		13800		16600		31600	
LEAD	1000	7.0	J-	8.9	J	14.6	J	11.3	J	9.0	J-	10.3	J-	4890		83.0	
MAGNESIUM	--	17600	J	36600	J	1300	J	12800	J	28000		20200		2990		15500	
MANGANESE	470000	309	J	396	J	711	J	259	J	424	J	355	J	322	J	573	J
MERCURY	6100	0.11	U	0.11	U	0.13	U	0.12	U	0.11	U	0.042	J	0.75		0.059	J
NICKEL	410000	11.2	J	13.9	J	8.4	J	10.8	J	15.3		15.4		11.9		20.9	
POTASSIUM	--	789		910		537	J	697		1160		1100		653	J	1450	
SELENIUM	100000	4.0	UJ	3.9	UJ	0.43	J	4.1	UJ	0.60	J+	0.79	J+	1.5	J+	1.8	J+
SILVER	100000	1.1	UJ	1.1	UJ	1.3	UJ	1.2	UJ	1.1	UJ	1.2	UJ	1.5	UJ	1.7	UJ
SODIUM	--	229	J	261	J	218	J	227	J	573	U	576	U	742	U	873	U
THALLIUM	--	2.8	UJ	2.8	UJ	3.2	UJ	2.9	UJ	2.9	UJ	2.9	UJ	3.7	UJ	4.4	UJ
VANADIUM	140000	6.4	J	8.6	J	12.3	J	6.1	J	8.5		10.1		8.4		21.4	
ZINC	1000000	32.0	J	42.2	J	25.4	J	31.2	J	40.1		41.0		7000		119	
CYANIDE	1000000	2.8	R	2.8	U	3.2	U	2.9	U	2.9	U	2.9	U	3.7	UJ	4.4	U

-- No applicable RAL's available.

Values highlighted in GREEN exceed background detection limits, are three times background, or ten times "J" background concentrations.

Values highlighted in ORANGE exceed background detection limits, are three times background, or ten times "J" background concentrations, and exceed corresponding RAL's.

DUNAVAN OIL
Oakwood, Illinois

SOIL & SEDIMENT SAMPLE SUMMARY

TABLE 1

Analytical Results (Qualified Data)																				
Case #: 35229		SDG : E0001																		
Site :		DUNAVAN OIL																		
Lab. :		ENVSYS																		
Reviewer :																				
Date :																				
Sample Number :	U.S. EPA	Ontario Sediment	E0018	E0019	E00L8	E00M1	E00M3	S106	S107	S108 (Bkgnd)	E00L9	E00M0								
Sampling Location :	Removal	Guidelines	S101 (Bkgnd)	S102	S103	S104	S105 (Dup S104)	S106	S107	S108 (Bkgnd)	S109	S110								
Matrix :	Action	or	Sediment	Sediment	Sediment	Soil	Soil	Soil	Soil	Soil	Sediment	Sediment								
Depth Sampled	Levels	U.S. EPA	6" - 12"	6" - 12"	6" - 12"	2' - 3'	2' - 3'	6" - 10"	6" - 12"	6" - 8"	6" - 12"	6" - 12"								
Units :	(RAL's)	Ecotox	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg								
Date Sampled :		Thresholds	4/12/2006	4/12/2006	6/1/2006	6/1/2006	6/1/2006	4/11/2006	4/11/2006	4/11/2006	6/1/2006	6/1/2006								
Time Sampled :	ug/Kg	ug/Kg																		
%Moisture :			49	39	32	32	34				52	23								
pH :																				
Dilution Factor :			1.0	1.0	1.0	1.0	1.0				1.0	1.0								
Volatile Compound			Res	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U			L		L		L	
Chloromethane			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U			L		L		L	
Vinyl chloride			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U			A		A		A	
Bromomethane			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U			B		B		B	
Chloroethane			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
Trichlorofluoromethane			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U			M		M		M	
1,1-Dichloroethene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U			I		I		I	
1,1,2-Trichloro-1,2,2-trifluoroethane			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U			S		S		S	
Acetone	20000000000		10		22	R	170	U	14	U	14	U			P		P		P	
Carbon Disulfide	10000000000		8.2	R	6.8	R	4.1	J	7.2	U	7.2	U			L		L		L	
Methyl acetate			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U			A		A		A	
Methylene chloride			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U			C		C		C	
trans-1,2-Dichloroethene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U			E		E		E	
Methyl tert-butyl ether			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U			D		D		D	
1,1-Dichloroethane			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
cis-1,2-Dichloroethene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U			S		S		S	
2-Butanone	--		16	R	14	R	49	U	14	U	14	U			A		A		A	
Bromochloromethane			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U			M		M		M	
Chloroform			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U			P		P		P	
1,1,1-Trichloroethane			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U			L		L		L	
Cyclohexane			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U			E		E		E	
Carbon tetrachloride			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
Benzene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
1,2-Dichloroethane			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
1,4-Dioxane			160	R	140	R	150	R	140	R	140	R								
Trichloroethene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
Methylcyclohexane			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
1,2-Dichloropropane			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
Bromodichloromethane			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
cis-1,3-Dichloropropene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
4-Methyl-2-pentanone			16	R	14	R	15	U	14	U	14	U								
Toluene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
trans-1,3-Dichloropropene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
1,1,2-Trichloroethane			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
Tetrachloroethene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
2-Hexanone			16	R	14	R	15	U	14	U	14	U								
Dibromochloromethane			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
1,2-Dibromoethane			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
Chlorobenzene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
Ethylbenzene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
o-Xylene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
m,p-Xylene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
Styrene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
Bromoform			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
Isopropylbenzene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
1,1,2,2-Tetrachloroethane			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
1,3-Dichlorobenzene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
1,4-Dichlorobenzene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
1,2-Dichlorobenzene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
1,2-Dibromo-3-chloropropane			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
1,2,4-Trichlorobenzene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								
1,2,3-Trichlorobenzene			8.2	R	6.8	R	7.3	U	7.2	U	7.2	U								

-- No RAL's, guidelines or thresholds available.

Values highlighted in BLUE exceed in-water segment background detection limits, are three times background, or ten times "J" background concentrations.

DUNAVAN OIL
Oakwood, Illinois

SOIL & SEDIMENT SAMPLE SUMMARY

TABLE 1

Analytical Results (Qualified Data)

Case #: 35229 SDG: E0001
Site: DUNAVAN OIL
Lab.: ENVSYN
Reviewer:
Date:

Sample Number : Sampling Location : Matrix : Depth Sampled Units : Date Sampled : Time Sampled : pH : Dilution Factor :	U.S. EPA Removal Action Levels (RAL's) ug/Kg	Ontario Sediment Guidelines or U.S. EPA Ecotox Thresholds ug/Kg	E0018 S101 (Bkgnd) Sediment 6" - 12" ug/Kg 4/12/2006	E0019 S102 Sediment 6" - 12" ug/Kg 4/12/2006	E0036 S103 Sediment 6" - 12" ug/Kg 4/13/2006	E0037 S104 Soil 2' - 3' ug/Kg 4/13/2006	E0038 S105 (Dup S104) Soil 2' - 3' ug/Kg 4/13/2006	E0029 S106 Soil 6" - 10" ug/Kg 4/12/2006	E0030 S107 Soil 6" - 12" ug/Kg 4/12/2006	E0031 S108 (Bkgnd) Soil 6" - 8" ug/Kg 4/12/2006	E0039 S109 Sediment 6" - 12" ug/Kg 4/13/2006	E0040 S110 Sediment 6" - 12" ug/Kg 4/13/2006
			49 7.8 1.0	39 7.6 1.0	49 6.7 1.0	17 7.8 1.0	31 7.5 1.0	41 6.8 1.0	48 7.8 1.0	40 7.5 1.0	40 7.4 1.0	47 4.2 1.0
Semivolatile Compound			Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	1000000000		150	J	170	J	670	U	410	U	490	U
Phenol		--	77	J	68	J	670	U	410	U	490	U
Bis(2-Chloroethyl)ether			670	U	560	U	670	U	410	U	490	U
2-Chlorophenol			670	U	560	U	670	U	410	U	490	U
2-Methylphenol			670	U	560	U	670	U	410	U	490	U
2,2'-Oxybis(1-chloropropane)			670	U	560	U	670	U	410	U	490	U
Acetophenone	1000000000	--	270	J	420	J	670	U	410	U	490	U
4-Methylphenol			670	U	560	U	670	U	410	U	490	U
N-Nitroso-di-n-propylamine			670	U	560	U	670	U	410	U	490	U
Hexachloroethane			670	U	560	U	670	U	410	U	490	U
Nitrobenzene			670	U	560	U	670	U	410	U	490	U
Isophorone			670	U	560	U	670	U	410	U	490	U
2-Nitrophenol			670	U	560	U	670	U	410	U	490	U
2,4-Dimethylphenol			670	U	560	U	670	U	410	U	490	U
Bis(2-chloroethoxy)methane			670	U	560	U	670	U	410	U	490	U
2,4-Dichlorophenol			670	U	560	U	670	U	410	U	490	U
Naphthalene	820000000	480	670	U	170	J	670	U	410	U	490	U
4-Chloroaniline			670	R	560	U	670	R	410	U	490	U
Hexachlorobutadiene			670	U	560	U	670	U	410	U	490	U
Caprolactam			670	U	560	U	670	U	410	U	490	U
4-Chloro-3-methylphenol			670	U	560	U	670	U	410	U	490	U
2-Methylnaphthalene	--	670	670	U	660	J	150	J	410	U	490	U
Hexachlorocyclopentadiene			670	R	560	U	670	R	410	U	490	U
2,4,6-Trichlorophenol			670	U	560	U	670	U	410	U	490	U
2,4,5-Trichlorophenol			670	U	560	U	670	U	410	U	490	U
1,1'-Biphenyl	1000000000	1100	670	U	560	U	670	U	410	U	490	U
2-Chloronaphthalene			670	U	560	U	670	U	410	U	490	U
2-Nitroaniline			1300	U	1100	U	1300	U	800	U	960	U
Dimethylphthalate			670	U	560	U	670	U	410	U	490	U
2,6-Dinitrotoluene			670	U	560	U	670	U	410	U	490	U
Acenaphthylene	--		670	U	560	U	670	U	410	U	490	U
3-Nitroaniline			1300	U	1100	U	1300	U	800	U	960	U
Acenaphthene	1000000000		670	U	560	U	670	U	410	U	490	U
2,4-Dinitrophenol			1300	U	1100	U	1300	U	800	U	960	U
4-Nitrophenol			1300	U	1100	U	1300	U	800	U	960	U
Dibenzofuran	82000000	2000	670	U	160	J	670	U	410	U	490	U
2,4-Dinitrotoluene			670	U	560	U	670	U	410	U	490	U
Diethylphthalate			670	U	560	U	670	U	410	U	490	U
Fluorene	820000000	540	670	U	71	J	670	U	410	U	490	U
4-Chlorophenyl-phenylether			670	U	560	U	670	U	410	U	490	U
4-Nitroaniline			1300	U	1100	U	1300	U	800	U	960	U
4,6-Dinitro-2-methylphenol			1300	U	1100	U	1300	U	800	U	960	U
N-Nitrosodiphenylamine			670	U	560	U	670	U	410	U	490	U
1,2,4,5-Tetrachlorobenzene			670	U	560	U	670	U	410	U	490	U
4-Bromophenyl-phenylether			670	U	560	U	670	U	410	U	490	U
Hexachlorobenzene			670	U	560	U	670	U	410	U	490	U
Atrazine			670	U	560	U	670	U	410	U	490	U
Pentachlorophenol			1300	R	1100	R	1300	U	800	U	960	U
Phenanthrene	1000000000	850	670	U	500	J	190	J	46	J	490	U
Anthracene	1000000000	960	670	U	80	J	670	U	410	U	490	U
Carbazole	--		670	U	560	U	670	U	410	U	490	U
Di-n-butylphthalate	1000000000	11000	670	U	560	U	670	U	410	U	490	U
Fluoranthene	820000000	2900	670	U	100	J	670	U	410	U	490	U
Pyrene	810000000	660	670	U	88	J	670	U	410	U	490	U
Butylbenzylphthalate			670	U	560	U	670	U	410	U	490	U
3,3'-Dichlorobenzidine			670	R	560	U	670	R	410	U	490	U
Benzo(a)anthracene	780000	1600	72	J	560	U	670	U	410	U	490	U
Chrysene	78000000	2800	670	U	560	U	670	U	410	U	490	U
Bis(2-ethylhexyl)phthalate			670	U	560	U	670	U	410	U	490	U
Di-n-octylphthalate			670	U	560	U	670	U	410	U	490	U
Benzo(b)fluoranthene	780000		670	U	560	U	670	U	410	U	490	U
Benzo(k)fluoranthene	7800000		670	U	560	U	670	U	410	U	490	U
Benzo(a)pyrene	78000		670	U	560	U	670	U	410	U	490	U
Indeno(1,2,3-cd)pyrene	780000		670	U	560	U	670	U	410	U	490	U
Dibenzo(a,h)anthracene	78000		670	U	560	U	670	U	410	U	490	U
Benzo(g,h,i)perylene	--		670	U	560	U	670	U	410	U	490	U
2,3,4,6-Tetrachlorophenol			670	U	560	U	670	U	410	U	490	U

-- No RAL's, guidelines or thresholds available.

Cells highlighted in GREEN exceed overland flow segment background detection limits, are three times background, or ten times "J" background concentrations.

Cells highlighted in BLUE exceed in-water segment background detection limits, are three times background, or ten times "J" background concentrations.

DUNAVAN OIL
Oakwood, Illinois

SOIL & SEDIMENT SAMPLE SUMMARY

TABLE 1

Analytical Results (Qualified Data)																				
Case #: 35229		SDG : E0033, E0002																		
Site :		DUNAVAN OIL																		
Lab. :		ENVSYS																		
Reviewer :																				
Date :																				
Sample Number :	U.S. EPA	Ontario Sediment	E0018	E0019	E0036	E0037	E0038	E0029	E0030	E0031	E0039	E0040								
Sampling Location :	Removal	Guidelines	S101 (Bkgnd)	S102	S103	S104	S105 (Dup S104)	S106	S107	S108 (Bkgnd)	S109	S110								
Matrix :	Action	or	Sediment	Sediment	Sediment	Soil	Soil	Soil	Soil	Soil	Sediment	Sediment								
Depth Sampled	Levels	U.S. EPA	6" - 12"	6" - 12"	6" - 12"	2' - 3'	2' - 3'	6" - 10"	6" - 12"	6" - 8"	6" - 12"	6" - 12"								
Units :	(RAL's)	Ecotox	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg								
Date Sampled :		Thresholds*	4/12/2006	4/12/2006	4/13/2006	4/13/2006	4/13/2006	4/12/2006	4/12/2006	4/12/2006	4/13/2006	4/13/2006								
Time Sampled :	ug/Kg	ug/Kg																		
%Moisture :			49	39	49	17	31	41	48	40	40	47								
pH :					6.7	7.8	7.5				7.4	4.2								
Dilution Factor :			1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1	1								
Pesticide Compound			Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	91000		6.7	UJ	5.6	UJ	3.3	UJ	2	UJ	2.5	UJ	5.8	UJ	0.80	J	5.7	UJ	2.8	UJ
beta-BHC	320000		6.7	UJ	5.6	UJ	3.3	UJ	2	UJ	2.5	UJ	5.8	UJ	6.5	UJ	1.9	J	2.8	UJ
delta-BHC	--		6.7	UJ	5.6	UJ	3.3	U	2	U	2.5	U	5.8	UJ	6.5	UJ	0.86	J	2.8	U
gamma-BHC (Lindane)	440000		6.7	UJ	5.6	UJ	3.3	UJ	2	UJ	2.5	R	5.8	UJ	1.8	J	5.7	UJ	2.8	UJ
Heptachlor	130000	--	6.7	U	5.6	U	3.3	UJ	2	UJ	2.5	UJ	5.8	U	2.0	J	5.7	U	0.85	J
Aldrin			6.7	U	5.6	U	3.3	UJ	2	UJ	2.5	UJ	5.8	U	6.5	U	5.7	U	2.8	UJ
Heptachlor epoxide	63000		6.7	U	5.6	U	3.3	U	1.3	J	2.5	U	5.8	U	0.69	J	2.1	J	2.8	U
Endosulfan I	120000000	2.9*	6.7	U	5.6	U	3.3	U	2	U	2.5	U	5.8	U	1.3	J	1.0	J	0.96	J
Dieldrin	36000		13	U	11	U	6.5	U	4	U	1.8	J	11	U	3.2	J	11	U	5.5	U
4,4'-DDE	1700000	19000	1.9	J	11	U	6.5	U	4	U	3.8	J	11	U	1.5	J	4.1	J	5.5	U
Endrin	6100000		13	UJ	11	UJ	6.5	U	1.7	J	4.8	UJ	1.8	J	4.9	J	11	UJ	5.5	U
Endosulfan II	120000000		13	UJ	11	UJ	6.5	U	1.9	J	4.8	U	11	UJ	1.8	J	2.3	J	5.5	U
4,4'-DDD	2400000	6000	13	U	11	U	6.5	U	4	U	4.8	U	11	U	2.2	J	1.6	J	5.5	U
Endosulfan sulfate	--	--	13	U	11	U	6.5	U	1.8	J	4.8	U	11	U	1.8	J	7.2	J	5.5	U
4,4'-DDT	1700000	12000	13	UJ	11	UJ	6.5	U	4.5	J	1.5	J	11	UJ	6.1	J	4.4	J	5.5	U
Methoxychlor		19*	67	UJ	56	UJ	33	UJ	20	UJ	25	UJ	58	UJ	65	UJ	28	UJ	4.5	J
Endrin ketone	--		13	U	11	U	6.5	U	4	U	2.1	J	11	U	13	U	11	U	5.5	U
Endrin aldehyde	--	--	13	UJ	11	UJ	6.5	U	2.4	J	4.8	U	11	UJ	3.7	J	11	UJ	5.5	U
alpha-Chlordane			6.7	U	5.6	U	3.3	U	2	U	2.5	U	5.8	U	6.5	U	5.7	U	2.8	U
gamma-Chlordane	440000	6000	6.7	UJ	5.6	UJ	3.3	U	2	U	0.66	J	5.8	UJ	0.43	J	0.77	J	3.6	J
Toxaphene			670	U	560	U	330	U	200	U	250	U	580	U	650	U	570	U	280	U

-- No applicable RAL's, Ontario Guidelines or Ecotox Thresholds available.

Cells highlighted in **GREEN** exceed overland flow segment background detection limits, are three times background, or ten times "J" background concentrations.

Cells highlighted in **BLUE** exceed in-water segment background detection limits, are three times background, or ten times "J" background concentrations.

DUNAVAN OIL
Oakwood, Illinois

SOIL & SEDIMENT SAMPLE SUMMARY

TABLE 1

Analytical Results (Qualified Data)																						
Case #: 35229		SDG : E0033, E0002																				
Site :		DUNAVAN OIL																				
Lab :		ENVSYS																				
Reviewer :																						
Date :																						
Sample Number :	U.S. EPA	Ontario Sediment	E0018	E0019	E0036	E0037	E0038	E0029	E0030	E0031	E0039	E0040										
Sampling Location :	Removal	Guidelines	S101 (Bkgnd)	S102	S103	S104	S105 (Dup S104)	S106	S107	S108 (Bkgnd)	S109	S110										
Matrix :	Action	or	Sediment	Sediment	Sediment	Soil	Soil	Soil	Soil	Soil	Sediment	Sediment										
Depth Sampled	Levels	U.S. EPA	6" - 12"	6" - 12"	6" - 12"	2' - 3'	2' - 3'	6" - 10"	6" - 12"	6" - 8"	6" - 12"	6" - 12"										
Units :	(RAL's)	Ecotox	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg										
Date Sampled :		Thresholds	4/12/2006	4/12/2006	4/13/2006	4/13/2006	4/13/2006	4/12/2006	4/12/2006	4/12/2006	4/13/2006	4/13/2006										
Time Sampled :	ug/Kg	ug/Kg																				
%Moisture :			49	39	49	17	31	41	48	40	40	47										
pH :			7.8	7.6	6.7	7.8	7.5	6.8	7.8	7.5	7.4	4.2										
Dilution Factor :			1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0										
ANALYTE			Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Aroclor-1016	1400000	53000	65	R	54	U	65	UJ	40	UJ	48	UJ	56	U	63	U	55	U	55	UJ	53	J
Aroclor-1221	--	--	65	R	54	U	65	U	40	U	48	U	56	U	63	U	55	U	55	U	63	J
Aroclor-1232			65	R	54	U	65	U	40	U	48	U	56	U	63	U	55	U	55	U	62	U
Aroclor-1242			65	R	54	U	65	U	40	U	48	U	56	U	63	U	55	U	55	U	62	U
Aroclor-1248	--	150000	65	R	54	U	65	U	40	U	48	U	56	U	63	U	55	U	55	U	21	J
Aroclor-1254			65	R	54	U	65	U	40	U	48	U	56	U	63	U	55	U	55	U	62	U
Aroclor-1260			65	R	54	UJ	65	UJ	40	UJ	48	UJ	56	UJ	63	UJ	55	UJ	55	UJ	62	UJ
Aroclor-1262			65	R	54	U	65	U	40	U	48	U	56	U	63	U	55	U	55	U	62	U
Aroclor-1268			65	R	54	UJ	65	U	40	U	48	U	56	UJ	63	UJ	55	UJ	55	U	62	U

-- No applicable RAL's, Ontario Guidelines or Ecotox Thresholds.

Cells highlighted in **BLUE** exceed in-water segment background detection limits, are three times background, or ten times "J" background concentrations.

DUNAVAN OIL
Oakwood, Illinois

SOIL & SEDIMENT SAMPLE SUMMARY

TABLE 1

Analytical Results (Qualified Data)																						
Case #: 35229		SDG : ME0028																				
Site :		DUNAVAN OIL																				
Lab. :		SENTIN																				
Reviewer :		S. CONNET																				
Date :		06/05/06																				
Sample Number :	U.S. EPA	Ontario Sediment	ME0018	ME0019	ME0036	ME0037	ME0038	ME0029	ME0030	ME0031	ME0039	ME0040										
Sampling Location :	Removal	Guidelines**	S101 (Bkgnd)	S102	S103	S104	S105 (Dup S104)	S106	S107	S108 (Bkgnd)	S109	S110										
Matrix :	Action	or	Sediment	Sediment	Sediment	Soil	Soil	Soil	Soil	Soil	Sediment	Sediment										
Depth Sampled	Levels	U.S. EPA	6" - 12"	6" - 12"	6" - 12"	2' - 3'	2' - 3'	6" - 10"	6" - 12"	6" - 8"	6" - 12"	6" - 12"										
Units :	(RAL's)	Ecotox	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg										
Date Sampled :		Thresholds*	4/12/2006	4/12/2006	4/13/2006	4/13/2006	4/13/2006	4/12/2006	4/12/2006	4/12/2006	4/13/2006	4/13/2006										
Time Sampled :	mg/Kg	mg/Kg	12:30	12:20	10:05	11:00	11:00	17:20	17:40	18:00	10:20	10:40										
%Solids :			50.1	72.6	83.7	68.7	87.7	54.3	66.3	53.0	73.6	63.0										
Dilution Factor :			1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0										
ANALYTE			Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag		
ALUMINUM	1000000	--	3470		4560		4460		20500		17900		11200		4150		6900		5980		1720	
ANTIMONY	8200	--	12.0	UJ	8.3	UJ	7.2	UJ	8.7	UJ	6.8	UJ	11.0	UJ	9.0	UJ	11.3	UJ	8.2	UJ	9.5	UJ
ARSENIC	6100	33**/8.2*	4.0	J	4.5	J	3.6		4.1		3.1		5.4		11.3		10.1		5.0		22.9	
BARIUM	1000000	--	29.4	J	30.9	J	21.1	J	39.1		34.8		22.6	J	48.9		24.2	J	36.4		67.6	
BERYLLIUM	130	--	1.0	UJ	0.69	UJ	0.60	UJ	1.4		0.98		1.5		0.75	UJ	1.7		0.68	UJ	0.79	UJ
CADMIUM	10000	10**/1.2*	1.0	UJ	0.14	J	0.16	J	0.57	J	0.37	J	0.89	J	0.36	J	0.76	J	0.68	U	0.79	U
CALCIUM	--	--	12600	J	15700	J	3440		2670		2010		7800		8590		8780		8050		2090	
CHROMIUM	1000000	110**	6.0	J	8.1	J	6.1		22.4		17.7		7.5		5.8		4.9		11.3		3.9	
COBALT	1000000	50**	3.9	J	6.7	J	6.0	U	36.9		20.3		36.3		7.5	U	14.0		8.1		7.9	U
COPPER	820000	110**/34*	9.8	J	11.4	J	10.3	J-	38.2		37.9		63.1		18.4	J-	13.6	J-	10.4	J-	4.0	UJ
IRON	1000000	40000**	8350	J	12500	J	10700		39000		32300		22300		16400		10100		21600		56700	
LEAD	1000	250**/47*	7.5	J	9.1	J-	11.8	J-	14.9	J-	12.7		17.8	J-	36.7		20.7	J-	10.4	J-	57.5	
MAGNESIUM	--	--	4760	J	8280	J	2150		6110		4650		3520		2270		3660		4890		794	U
MANGANESE	470000	1100**	209	J	325	J	164	J	950	J	405	J	2230	J	531	J	971	J	1050	J	51.6	J
MERCURY	6100	2**/0.15*	0.20	U	0.14	U	0.069	J	0.15	U	0.11	U	0.074	J	0.25		0.19	U	0.14	U	0.073	J
NICKEL	410000	75**/21*	8.8	J	15.6	J	9.9		54.0		38.4		37.1		9.3		40.9		17.4		2.5	J
POTASSIUM	--	--	781	J	826		567	J	1300		941		381	J	674	J	406	J	752		2750	
SELENIUM	100000	--	1.1	J	0.55	J	0.84	J+	1.6	J+	1.2	J+	1.9	J+	1.5	J+	1.1	J+	1.4	J+	2.8	J+
SILVER	100000	0.5**	2.0	U	1.4	UJ	1.2	UJ	1.5	UJ	1.1	UJ	1.8	UJ	1.5	UJ	1.9	UJ	1.4	UJ	1.6	UJ
SODIUM	--	--	366	J	315	J	597	U	728	U	570	U	921	U	754	U	943	U	679	U	2060	
THALLIUM	--	--	5.0	UJ	3.4	UJ	3.0	UJ	3.6	UJ	2.9	UJ	4.6	UJ	0.53	J-	4.7	UJ	3.4	UJ	20.3	J-
VANADIUM	140000	--	8.3	J	9.4	J	7.8		21.9		16.9		9.2	U	8.8		9.4	U	13.9		13.4	
ZINC	1000000	820**/150*	30.7	J	43.8	J	36.8		202		159		90.8		81.3		145		50.6		17.8	J-
CYANIDE	1000000	0.1**	5.0	U	3.4	U	3.0	U	3.6	U	2.9	U	4.6	U	3.8	U	4.7	U	3.4	U	4.0	UJ

-- No applicable RAL's, Ontario Guidelines, or Ecotox Thresholds available.

Values highlighted in GREEN exceed overland flow segment background detection limits, are three times background, or ten times "J" background concentrations.

Values highlighted in BLUE exceed in-water segment background detection limits, are three times background, or ten times "J" background concentrations.

Values highlighted in RED exceed background detection limits, are three times background, or ten times "J" background concentrations, and exceed corresponding Ontario Sediment Guidelines or Ecotox Threshold benchmark levels.

DUNAVAN OIL
Oakwood, Illinois

GROUNDWATER SAMPLE SUMMARY

TABLE 2

Analytical Results (Qualified Data)																			
Case #: 35229		SDG : E0010																	
Site :		DUNAVAN OIL																	
Lab. :		ENVSYS																	
Reviewer :																			
Date :																			
Sample Number :		E0010		E0011		E0020		E0023		E0024		E0025		E0035		E0013		E0022	
Sampling Location :		G201		G202		G203		G204		G289 (Dup G204)		G205		G206		TRIP BLANK 1		FIELD BLANK	
Matrix :		Water		Water		Water		Water		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		4/11/2006		4/11/2006		4/12/2006		4/12/2006		4/12/2006		4/12/2006		4/13/2006		4/14/2006		4/12/2006	
Time Sampled :																			
%Moisture :		0		0		0		0		0		0		0		0		0	
pH :																			
Dilution Factor :		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloromethane		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.31	J	0.50	U	0.50	U
Vinyl chloride		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroethane		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichlorofluoromethane		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluoroethane		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Acetone		5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Carbon Disulfide		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl acetate		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylene chloride		0.50	U	0.61	U	0.51	U	0.64	U	0.58	U	0.78	U	0.50	U	0.63	U	0.68	J
trans-1,2-Dichloroethene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl tert-butyl ether		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethane		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,2-Dichloroethene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Butanone		5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Bromochloromethane		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroform		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,1-Trichloroethane		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Cyclohexane		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Carbon tetrachloride		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Benzene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloroethane		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,4-Dioxane		20	R	20	R	20	R	20	R	10	J	20	R	20	R	20	R	20	R
Trichloroethene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylcyclohexane		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloropropane		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromodichloromethane		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,3-Dichloropropene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.21	J
4-Methyl-2-pentanone		5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Toluene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.90	
trans-1,3-Dichloropropene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Tetrachloroethene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Hexanone		5.0	U	5.0	U	5.0	U	5.0	U	3.2	J	5.0	U	5.0	U	3.3	J	5.0	U
Dibromochloromethane		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromoethane		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Ethylbenzene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
o-Xylene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
m,p-Xylene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.27	J
Styrene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromofom		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Isopropylbenzene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2,2-Tetrachloroethane		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,3-Dichlorobenzene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,4-Dichlorobenzene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichlorobenzene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromo-3-chloropropane		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,3-Trichlorobenzene		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

- Chloromethane - No MCL available, however, U.S. EPA RAL is 100 ug/L.
- 1,4 Dioxane - No MCL available, however, U.S. EPA RAL is 700ug/L.
- 2-Hexanone - No applicable standard and/or health advisories

DUNAVAN OIL

Oakwood, Illinois

GROUNDWATER SAMPLE SUMMARY

TABLE 2

Analytical Results (Qualified Data) Case #: 35229 SDG : E0010 Site : DUNAVAN OIL Lab. : ENVSYS Reviewer : Date :																				
Sample Number :	E0010	E0011	E0020	E0023	E0024	E0025	E0035	E0013	E0026	E0022										
Sampling Location :	G201	G202	G203	G204	G289 (Dup G204)	G205	G206	TRIP BLANK 1	TRIP BLANK 2	FIELD BLANK										
Matrix :	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water										
Units :	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L										
Date Sampled :	4/17/2006	4/14/2006	4/14/2006	4/12/2006	4/12/2006	4/5/2006	4/13/2006	4/14/2006	4/12/2006	4/12/2006										
Time Sampled :																				
%Moisture :	0	0	0	0	0	0	0	0	0	0										
pH :																				
Dilution Factor :	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0										
Volatile SIM Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
1,4-Dioxane	20	R	18	R	15	R	30	R	29	R	19	R	19	R	20	R	23	R	25	R
1,2-Dibromoethane	0.10	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	U	0.098	J	0.12	J	0.050	UJ
1,2-Dibromo-3-chloropropane	0.050	UJ	0.050	UJ	0.050	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.063	U	0.050	UJ	0.089	J	0.050	UJ

DUNAVAN OIL
Oakwood, Illinois

GROUNDWATER SAMPLE SUMMARY

TABLE 2

Analytical Results (Qualified Data)														
Case #: 35229		SDG: E0010												
Site: DUNAVAN OIL														
Lab.: ENVSYS														
Reviewer:														
Date:														
Sample Number	E0010	E0011		E0020		E0023		E0025		E0035		E0022		
Sampling Location	G201	G202		G203		G204		G205		G206		FIELD BLANK		
Matrix:	Water	Water		Water		Water		Water		Water		Water		
Units:	ug/L	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		
Date Sampled:	4/11/2006	4/11/2006		4/12/2006		4/12/2006		4/12/2006		4/13/2006		4/12/2006		
Time Sampled:														
%Moisture:	0	0		0		0		0		0		0		
pH:	8.0	8.0		8.0		8.0		8.0		8.0		8.0		
Dilution Factor:	1.0	1.0		1.0		1.0		1.0		1.0		1.0		
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Phenol	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Bis(2-Chloroethyl)ether	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
2-Chlorophenol	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
2-Methylphenol	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
2,2'-Oxybis(1-chloropropane)	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Acetophenone	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
4-Methylphenol	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
N-Nitroso-di-n-propylamine	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Hexachloroethane	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Nitrobenzene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Isophorone	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
2-Nitrophenol	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
2,4-Dimethylphenol	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Bis(2-chloroethoxy)methane	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
2,4-Dichlorophenol	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Naphthalene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
4-Chloroaniline	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Hexachlorobutadiene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Caprolactam	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
4-Chloro-3-methylphenol	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
2-Methylnaphthalene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Hexachlorocyclopentadiene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
2,4,6-Trichlorophenol	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
2,4,5-Trichlorophenol	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
1,1'-Biphenyl	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
2-Chloronaphthalene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
2-Nitroaniline	10	UJ	10	UJ	10	UJ	10	UJ	10	R	10	U	10	UJ
Dimethylphthalate	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
2,6-Dinitrotoluene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Acenaphthylene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
3-Nitroaniline	10	UJ	10	UJ	10	UJ	10	UJ	10	R	10	U	10	UJ
Acenaphthene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
2,4-Dinitrophenol	10	UJ	10	UJ	10	UJ	10	UJ	10	R	10	UJ	10	UJ
4-Nitrophenol	10	UJ	10	UJ	10	UJ	10	UJ	10	R	10	U	10	UJ
Dibenzofuran	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
2,4-Dinitrotoluene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Diethylphthalate	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Fluorene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
4-Chlorophenyl-phenylether	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
4-Nitroaniline	10	UJ	10	UJ	10	UJ	10	UJ	10	R	10	U	10	UJ
4,6-Dinitro-2-methylphenol	10	UJ	10	UJ	10	UJ	10	UJ	10	R	10	U	10	UJ
N-Nitrosodiphenylamine	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
1,2,4,5-Tetrachlorobenzene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
4-Bromophenyl-phenylether	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Hexachlorobenzene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Atrazine	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Pentachlorophenol	10	UJ	10	UJ	10	UJ	10	UJ	10	R	10	UJ	10	UJ
Phenanthrene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Anthracene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Carbazole	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Di-n-butylphthalate	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Fluoranthene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Pyrene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Butylbenzylphthalate	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
3,3'-Dichlorobenzidine	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Benzo(a)anthracene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Chrysene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Bis(2-ethylhexyl)phthalate	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Di-n-octylphthalate	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Benzo(b)fluoranthene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Benzo(k)fluoranthene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Benzo(a)pyrene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ
Indeno(1,2,3-cd)pyrene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	UJ	5.0	UJ
Dibenzo(a,h)anthracene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	UJ	5.0	UJ
Benzo(g,h,i)perylene	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	UJ	5.0	UJ
2,3,4,6-Tetrachlorophenol	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	R	5.0	U	5.0	UJ

-- Sample E0024 (G289 (Dup of G204)) -- Broken sample container, therefore no semi-volatile analytical results.

DUNAVAN OIL
Oakwood, Illinois

GROUNDWATER SAMPLE SUMMARY

TABLE 2

Analytical Results (Qualified Data)														
Case #: 35229		SDG : E0010												
Site :		DUNAVAN OIL												
Lab. :		ENVSYS												
Reviewer :														
Date :														
Sample Number :	E0010	E0011	E0020	E0023	E0025	E0035	E0022							
Sampling Location :	G201	G202	G203	G204	G205	G206	FIELD BLANK							
Matrix :	Water	Water	Water	Water	Water	Water	Water							
Units :	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L							
Date Sampled :	4/11/2006	4/11/2006	4/12/2006	4/12/2006	4/12/2006	4/13/2006	4/12/2006							
Time Sampled :														
%Moisture :	0	0	0	0	0	0	0							
pH :														
Dilution Factor :	1.0	1.0	1.0	1.0	1.0	1.0	1.0							
Semivolatile SIM Compounds	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Naphthalene	0.10	UJ	0.10	UJ	0.066	J	0.10	UJ	0.10	R	0.10	UJ	0.10	UJ
2-Methylnaphthalene	0.10	UJ	0.10	UJ	0.059	J	0.10	UJ	0.10	R	0.10	UJ	0.10	UJ
Acenaphthylene	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	R	0.10	UJ	0.10	UJ
Acenaphthene	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	R	0.10	UJ	0.10	UJ
Fluorene	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	R	0.10	UJ	0.10	UJ
Pentachlorophenol	0.20	R	0.20	R	0.20	R	0.20	R	0.20	R	0.20	R	0.20	R
Phenanthrene	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	R	0.10	UJ	0.10	UJ
Anthracene	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	R	0.10	UJ	0.10	UJ
Fluoranthene	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	R	0.10	UJ	0.10	UJ
Pyrene	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	R	0.10	UJ	0.10	UJ
Benzo(a)anthracene	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	R	0.10	UJ	0.10	UJ
Chrysene	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	R	0.10	UJ	0.10	UJ
Benzo(b)fluoranthene	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	R	0.10	UJ	0.10	UJ
Benzo(k)fluoranthene	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	R	0.10	UJ	0.10	UJ
Benzo(a)pyrene	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	R	0.10	UJ	0.10	UJ
Indeno(1,2,3-cd)pyrene	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	R	0.10	UJ	0.10	UJ
Dibenzo(a,h)anthracene	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	R	0.10	UJ	0.10	UJ
Benzo(g,h,i)perylene	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	R	0.10	UJ	0.10	UJ

-- Sample E0024 (G289 (Dup of G204)) -- Broken sample container, therefore no semi-volatile analytical results.

DUNAVAN OIL
Oakwood, Illinois

GROUNDWATER SAMPLE SUMMARY

TABLE 2

Analytical Results (Qualified Data)																		
Case #: 35229		SDG : E0011																
Site :		DUNAVAN OIL																
Lab. :		ENVSYS																
Reviewer :																		
Date :																		
Sample Number :		Primary	E0010		E0011		E0020		E0023		E0024		E0025		E0035		E0022	
Sampling Location :		Drinking	G201		G202		G203		G204		G289 (Dup G204)		G205		G206		FIELD BLANK	
Matrix :		Water	Water		Water		Water		Water		Water		Water		Water		Water	
Units :		Standards	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :			4/11/2006		4/11/2006		4/12/2006		4/12/2006		4/12/2006		4/12/2006		4/13/2006		4/12/2006	
Time Sampled :		MCL's																
%Moisture :		ug/L	0		0		0		0		0		0		0		0	
pH :																		
Dilution Factor :			1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Pesticide Compound			Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC		--	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	R	0.050	UJ	0.050	UJ	0.050	UJ
beta-BHC		--	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	R	0.013	J	0.050	UJ	0.050	UJ
delta-BHC		--	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	R	0.050	UJ	0.050	UJ	0.050	UJ
gamma-BHC (Lindane)		0.2	0.050	R	0.050	R	0.050	R	0.050	R	0.050	R	0.050	R	0.050	R	0.050	UJ
Heptachlor		0.4	0.050	R	0.050	R	0.050	R	0.050	R	0.050	R	0.050	R	0.050	R	0.050	UJ
Aldrin		0.2*	0.050	R	0.050	R	0.050	R	0.050	R	0.050	R	0.050	R	0.050	R	0.050	UJ
Heptachlor epoxide		0.2	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	R	0.050	UJ	0.050	UJ	0.050	UJ
Endosulfan I		--	0.050	U	0.050	U	0.050	U	0.050	U	0.050	R	0.050	UJ	0.050	U	0.050	UJ
Dieldrin		0.2*	0.10	R	0.10	R	0.10	R	0.10	R	0.10	R	0.10	R	0.10	R	0.10	UJ
4,4'-DDE		--	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	R	0.10	UJ	0.10	UJ	0.10	UJ
Endrin		2	0.10	R	0.10	R	0.10	R	0.10	R	0.10	R	0.10	R	0.10	R	0.10	UJ
Endosulfan II		--	0.10	U	0.10	U	0.10	U	0.10	U	0.10	R	0.10	UJ	0.10	U	0.10	UJ
4,4'-DDD		--	0.10	U	0.027	J	0.10	U	0.10	U	0.10	R	0.10	UJ	0.10	U	0.10	UJ
Endosulfan sulfate		--	0.10	U	0.10	U	0.10	U	0.10	U	0.10	R	0.10	UJ	0.10	U	0.10	UJ
4,4'-DDT		--	0.10	U	0.10	U	0.021	J	0.10	U	0.10	R	0.10	UJ	0.10	U	0.10	UJ
Methoxychlor		40	0.036	J	0.50	U	0.50	U	0.50	U	0.50	R	0.50	UJ	0.50	U	0.50	UJ
Endrin ketone		--	0.10	U	0.10	U	0.10	U	0.10	U	0.10	R	0.10	UJ	0.10	U	0.10	UJ
Endrin aldehyde		--	0.10	U	0.10	U	0.10	U	0.10	U	0.10	R	0.10	UJ	0.10	U	0.10	UJ
alpha-Chlordane		--	0.050	U	0.050	U	0.050	U	0.050	U	0.050	R	0.050	UJ	0.050	U	0.050	UJ
gamma-Chlordane		2	0.050	U	0.050	U	0.050	U	0.23	J	0.050	R	0.17	UJ	0.050	U	0.050	UJ
Toxaphene		3	5.0	U	5.0	U	5.0	U	5.0	U	5.0	R	5.0	UJ	5.0	U	5.0	UJ

-- No applicable standards and/or health advisories

* U.S. EPA RAL

[illegible]

DUNAVAN OIL
Oakwood, Illinois

GROUNDWATER SAMPLE SUMMARY

TABLE 2

Analytical Results (Qualified Data)																	
Case #: 35229		SDG : ME0010															
Site :		DUNAVAN OIL															
Lab. :		SENTINEL															
Reviewer :		S. CONNET															
Date :		05/30/06															
Sample Number :	Primary	ME0010		ME0011		ME0020		ME0023		ME0024		ME0025		ME0035		ME0022	
Sampling Location :	Drinking	G201		G202		G203		G204		G289 (Dup G204)		G205		G206		FIELD BLANK	
Matrix :	Water	Water		Water		Water		Water		Water		Water		Water		Water	
Units :	Standards	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		4/11/2006		4/11/2006		4/12/2006		4/12/2006		4/12/2006		4/5/2006		4/13/2006		4/12/2006	
Time Sampled :	MCL's	16:45		17:25		12:40		14:20		14:20		14:50		10:00		14:30	
%Solids :	ug/L	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
ANALYTE		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	--																
ANTIMONY	6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
ARSENIC	10	0.34	J+	1.0	J+	1.8	J+	1.0	U	1.0	U	0.37	J+	0.71	J+	1.0	U
BARIUM	2000	0.64	J	10.3		11.9		0.88	J	0.25	J	0.35	J	39.1		0.56	J
BERYLLIUM	4	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
CADMIUM	5	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ
CALCIUM	--																
CHROMIUM	100	0.080	J	0.072	J	0.10	J	0.14	J	0.10	J	0.097	J	0.75	J	2.0	U
COBALT	--	0.033	J	0.38	J	0.18	J	0.031	J	1.0	U	0.036	J	0.23	J	1.0	U
COPPER	1300	2.0	U	6.0		2.0	U	2.0	U	2.0	U	48.4		11.1		2.0	U
IRON	--																
LEAD	15	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
MANGANESE	--	1.7		121		84.9		3.0		0.51	J	0.20	J	6.2		0.10	J
MERCURY	2	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
NICKEL	100	0.097	J	2.0		0.93	J	0.14	J	0.078	J	1.0	U	2.3		1.0	U
POTASSIUM	--																
SELENIUM	50	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	1.8	J	5.0	U	5.0	U
SILVER	--	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
SODIUM	--																
THALLIUM	2	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
VANADIUM	--	1.0	U	1.0	U	1.0	U	0.26	J+	1.0	U	0.58	J+	1.3		1.0	U
ZINC	--	20.0	J+	19.4	J+	5.7	J+	4.5	J+	4.0	J+	8.9	J+	16.4	J+	2.7	J+
CYANIDE	200	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	R	10.0	U	10.0	U

-- No applicable MCL's available.

Blank cells indicate no lab analysis conducted.

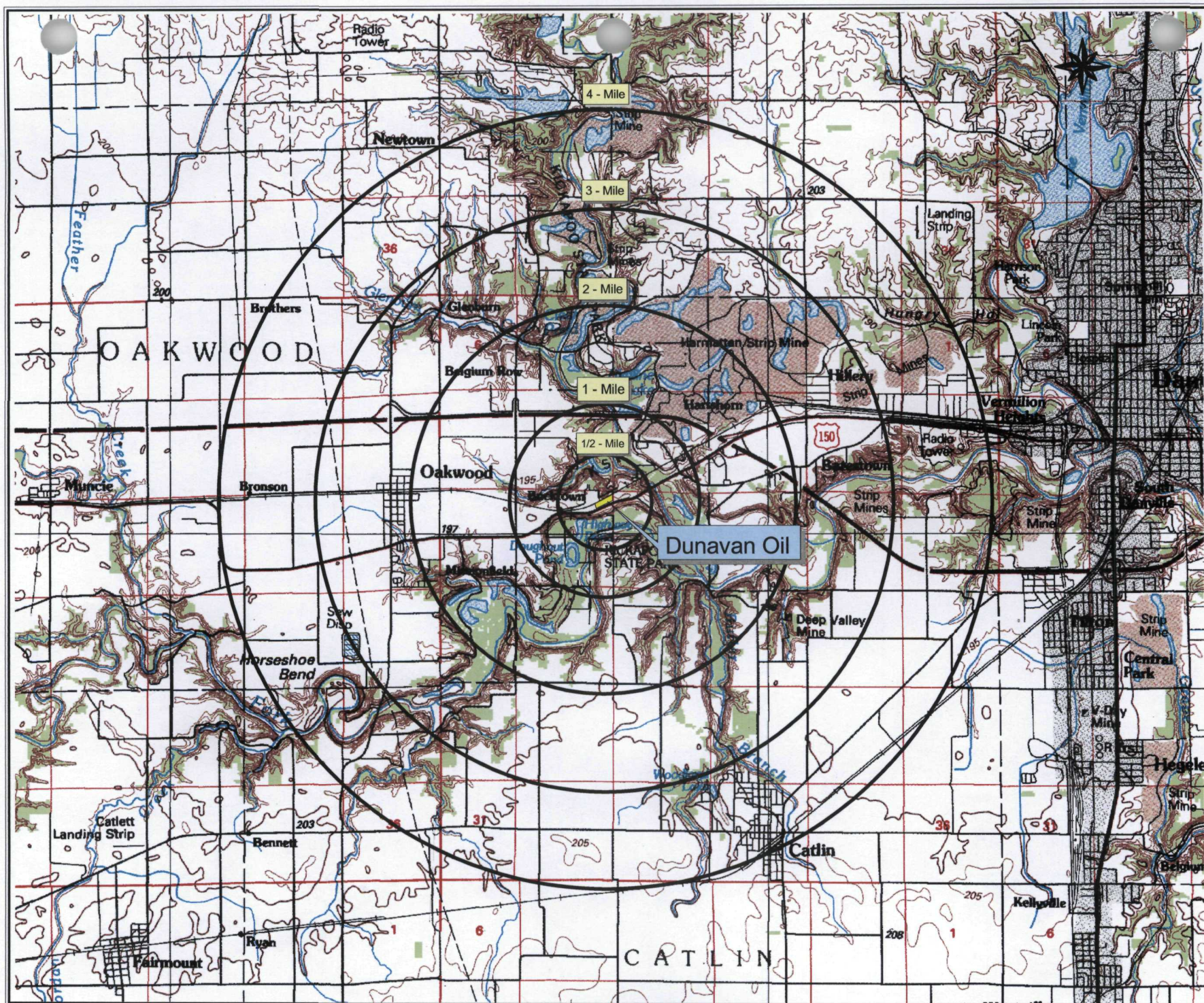
DUNAVAN WASTE OIL
SOIL & SEDIMENT SAMPLE DESCRIPTIONS
TABLE 3

SAMPLE	DEPTH	APPEARANCE	TVA READINGS (units) *		LOCATION
			PiD	FID	
X101	4.0' - 6.0'	Moist. Lt-med. tan silty clay & Lt-med. tan-orangish tan till.	Ambient @ 0.03	Ambient @ 2.4	In central-west portion of property. West of former lagoons.
X102	7' - 9'	Moist Lt greyish tan till	Ambient	Ambient	Southwest corner of property. West of former lagoon.
X103	5' - 7'	Med. Tan - orangish tan silty clay till.	Ambient	Ambient	Central - southern portion of the southwest quarter of the property. In former lagoons location.
X104	6' - 8'	Med. Dk grey - olive sandy silt, slight clay content. Slight solvent/oil odor.	Ambient	23 @ 7.5'	East portion of the southwest quarter of the property. In former lagoons location.
X105	9' - 11'	Lt tan silty, sandy, clay till.	Ambient	Ambient	Near the south property line in the central - south portion of the property. South of former lagoons.
X106	9' - 11'	Lt - med tan clay till w/some sand intermixed.	Ambient	Ambient	In southeast corner of the southeast quarter of the property. South of former lagoons.
X107	9' - 11'	Med tan silty sand w/some clay very moist, grading to med.-lt tan silty clay, olive color at 10.5' - 11'.	Ambient	Ambient	Southeast corner of southeast quarter of the property.
X108	9' - 11'	Lt tan - orangish tan clay till, hard.	Ambient	Ambient	Northeast portion of northeast quarter of the property.
X109	9' - 11'	Med - Lt tan clay till w/dry fine - med sand at 11'.	Ambient	Ambient	Near east property line in central-east portion of property.
X110	16' - 17.5'	Med tan - olive soft - firm silty clay till.	Ambient	12 @ 16.5'	West portion of northwest quarter just west of concrete pad formerly containing storage tanks.
X111	15' - 18'	Olive - Dk green soft clay till. Odor of petroleum/solvent.	Ambient	20 @ 17'	East portion of the northwest quarter of the property, just east of the concrete pad.
X112 (Dup. of X111)	15' - 18'	Same as above	Ambient	20 @ 17'	Same as above
X113	5' - 7'	Dk green - olive clayey silt w/minor stringers of very fine sand. Strong petroleum/solvent odor at 5' - 6'.	Ambient	30 @ 5.5'	Far west portion of the northeast quarter of the property, formerly a storage tank area.
X114	7' -8'	Olive green clay, firm - soft. Wet. Slight odor of old petroleum.	Ambient	15 @ 7.5'	In center of property. In former lagoons location.

DUNAVAN WASTE OIL
SOIL & SEDIMENT SAMPLE DESCRIPTIONS
TABLE 3
(CONT.)

SAMPLE	DEPTH	APPEARANCE	TVA READINGS (units) *		LOCATION
PID	FID				
X115	8' - 9'	Mottled Lt tan - orangish tan silty clay.	Ambient	Ambient	In northwest corner of the southeast quarter of the property. In former lagoons location.
X116 (Background)	12" - 18"	Med tan silty clay. According to County Soil reference, soil type 802B matches that on site.	Ambient	Ambient	South of railroad tracks approx. 200' east of the northeast corner of the property.
X117	Surface - 12"	Dk brown - black loam/humis to med tan silty clay.	Ambient	Ambient	Just north of north fenceline of property on downward slope to railroad tracks north of property near the northeast corner of the northwest quarter of the site.
X118 (Background)	6" - 10"	Med tan - orangish tan silty clay. According to County Soil reference soil type 802B matches that on site.	Ambient	Ambient	South of railroad tracks approx. 200' west of the northwest corner of the property.
S101	6" - 12"	Dk. Brn. Mud w/some sand present within silt matrix. Organic matter evident.	N/A	N/A	Sediment surface beneath 5' of water at north end of Pond #6 in Kickapoo State Park north of Dunavan Oil property.
S102	6" - 12"	Dk. Brn. Mud w/some sand present within silt matrix, some clay content. Organic matter present with organic decay odor.	N/A	N/A	Sediment surface beneath 5' of water at middle of Pond #6 in Kickapoo State Park north of Dunavan Oil property.
S103	6" - 12"	Black - Med grey mud w/ silty clay and abundant organic matter.	N/A	N/A	Sediment surface beneath 1' of water where site drainage route enters south end of Pond #6 in Kickapoo State Park north of Dunavan Oil property.
S104	2' - 3'	Med. Brn. - reddish Brn silty loose loam.	N/A	N/A	In drainage way midway between Dunavan property and Pond #6 at confluence of a drainage way from the west.
S105 (Dup of S104)	2' - 3'	Med. Brn. - reddish Brn silty loose loam.	N/A	N/A	Same as S104
S106	6" - 10"	Lt. tan - Dk brn clayey silt w/some fine sand and gravel.	N/A	N/A	In drainage way immediately north of former R. R. tracks and culvert receiving site run off.
S107	6" - 12"	Dk Brn loose loam w/some coal fines and chips intermixed.	N/A	N/A	In drainage way immediately south of former R. R. tracks and culvert receiving site run off.
S108	6" - 8"	Dk Brn - Black silty loam.	N/A	N/A	Collected west of site property along south side of former R. R. tracks.

APPENDIX A
4 – Mile Radius Map



4 - MILE MAP

APPENDIX B

Target Compound List

TARGET COMPOUND LIST

Volatile Target Compounds

Chloromethane	1,2-Dichloropropane
Bromomethane	cis-1,3-Dichloropropene
Vinyl Chloride	Trichloroethene
Chloroethane	Dibromochloromethane
Methylene Chloride	1,1,2-Trichloroethane
Acetone	Benzene
Carbon Disulfide	trans-1,3-Dichloropropene
1,1-Dichloroethene	Bromoform
1,1-Dichloroethane	4-Methyl-2-pentanone
1,2-Dichloroethene (total)	2-Hexanone
Chloroform	Tetrachloroethene
1,2-Dichloroethane	1,1,2,2-Tetrachloroethane
2-Butanone	Toluene
1,1,1-Trichloroethane	Chlorobenzene
Carbon Tetrachloride	Ethylbenzene
Vinyl Acetate	Styrene
Bromodichloromethane	Xylenes (total)

Base/Neutral Target Compounds

Hexachloroethane	2,4-Dinitrotoluene
bis(2-Chloroethyl) Ether	Diethylphthalate
Benzyl Alcohol	N-Nitrosodiphenylamine
bis (2-Chloroisopropyl) Ether	Hexachlorobenzene
N-Nitroso-Di-n-Propylamine	Phenanthrene
Nitrobenzene	4-Bromophenyl-phenylether

Hexachlorobutadiene	Anthracene
2-Methylnaphthalene	Di-n-Butylphthalate
1,2,4-Trichlorobenzene	Fluoranthene
Isophorone	Pyrene
Naphthalene	Butylbenzylphthalate
4-Chloroaniline	bis(2-Ethylhexyl)Phthalate
bis(2-chloroethoxy)Methane	Chrysene
Hexachlorocyclopentadiene	Benzo(a)Anthracene
2-Chloronaphthalene	3-3'-Dichlorobenzidene
2-Nitroaniline	Di-n-Octyl Phthalate
Acenaphthylene	Benzo(b)Fluoranthene
3-Nitroaniline	Benzo(k)Fluoranthene
Acenaphthene	Benzo(a)Pyrene
Dibenzofuran	Ideno(1,2,3-cd)Pyrene
Dimethyl Phthalate	Dibenz(a,h)Anthracene
2,6-Dinitrotoluene	Benzo(g,h,i)Perylene
Fluorene	1,2-Dichlorobenzene
4-Nitroaniline	1,3-Dichlorobenzene
4-Chlorophenyl-phenylether	1,4-Dichlorobenzene

Acid Target Compounds

Benzoic Acid	2,4,6-Trichlorophenol
Phenol	2,4,5-Trichlorophenol
2-Chlorophenol	4-Chloro-3-methylphenol
2-Nitrophenol	2,4-Dinitrophenol
2-Methylphenol	2-Methyl-4,6-dinitrophenol
2,4-Dimethylphenol	Pentachlorophenol
4-Methylphenol	4-Nitrophenol
2,4-Dichlorophenol	

Pesticide/PCB Target Compounds

alpha-BHC	Endrin Ketone
beta-BHC	Endosulfan Sulfate
delta-BHC	Methoxychlor
gamma-BHC (Lindane)	alpha-Chlordane
Heptachlor	gamma-Chlordane
Aldrin	Toxaphene
Heptachlor epoxide	Aroclor-1016
Endosulfan I	Aroclor-1221
4,4'-DDE	Aroclor-1232
Dieldrin	Aroclor-1242
Endrin	Aroclor-1248
4,4'-DDD	Aroclor-1254
Endosulfan II	Aroclor-1260
4,4'-DDT	

TARGET ANALYTE LIST

Inorganic Compounds

Aluminum	Manganese
Antimony	Mercury
Arsenic	Nickel
Barium	Potassium
Beryllium	Selenium
Cadmium	Silver
Calcium	Sodium
Chromium	Thallium
Cobalt	Vanadium
Copper	Zinc
Iron	Cyanide
Lead	Sulfide
Magnesium	

List of PNA's from Target Compound List

Naphthalene

2-Methylnaphthalene

2-Chloronaphthalene

Acenaphthylene

Acenaphthene

Fluorene

Phenanthrene

Anthracene

Fluoranthene

Pyrene

Benzo(a)anthracene

Chrysene

Benzo(b)fluoranthene

Benzo(k)fluoranthene

Benzo(a)pyrene

Indeno(1,2,3-cd)pyrene

Dibenz(a,h)anthracene

Benzo(g,h,i)perylene

DATA QUALIFIERS

QUALIFIER	DEFINITION ORGANICS	DEFINITION INORGANICS
U	Compound was tested for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For soil samples subjected to GPC clean-up procedures, the CRQL is also multiplied by two, to account for the fact that only half of the extract is recovered.	Analyte was analyzed for but not detected.
J	Estimated value. Used when estimating a concentration for tentatively identified compounds (TICS) where a 1:1 response is assumed or when the mass spectral data indicate the presence of a compound that meets the identification criteria and the result is less than the sample quantitation limit but greater than zero. Used in data validation when the quality control data indicate that a value may not be accurate.	Estimated value. Used in data validation when the quality control data indicate that a value may not be accurate.
C	This flag applies to pesticide results where the identification is confirmed by GC/MS.	Method qualifier indicates analysis by the Manual Spectrophotometric method.
B	Analyte was found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	The reported value is less than the CRDL but greater than the instrument detection limit (IDL).
D	Identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor as in the "E" flag, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and <u>all</u> concentration values are flagged with the "D" flag.	Not used.
E	Identifies compounds whose concentrations exceed the calibration range for that specific analysis. All extracts containing compounds exceeding the calibration range must be diluted and analyzed again. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses must be reported on separate Forms I. The Form I for the diluted sample must have the "DL" suffix appended to the sample number.	The reported value is estimated because of the presence of interference.
A	This flag indicates that a TIC is a suspected aldol concentration product formed by the reaction of the solvents used to process the sample in the laboratory.	Method qualifier indicates analysis by Flame Atomic Absorption (AA).
M	Not used.	Duplicate injection (a QC parameter not met).

N	Not used	Spiked sample (a QC parameter not met).
S	Not used.	The reported value was determined by the Method of Standard Additions (MSA).
W	Not used.	Post digestion spike for Furnace AA analysis (a QC parameter) is out of control limits of 85% to 115% recovery, while sample absorbance is less than 50% of spike absorbance.
*	Not used.	Duplicate analysis (a QC parameter not within control limits).
+	Not used.	Correlation coefficient for MSA (a QC parameter) is less than 0.995.
P	Not used.	Method qualifier indicates analysis by ICP (Inductively Coupled Plasma) Spectroscopy.
CV	Not used.	Method qualifier indicates analysis by Cold Vapor AA.
AV	Not used.	Method qualifier indicates analysis by Automated Cold Vapor AA.
AS	Not used.	Method qualifier indicates analysis by Semi-Automated Cold Spectrophotometry.
T	Not used.	Method qualifier indicates Titrimetric analysis.
NR	The analyte was not required to be analyzed.	The analyte was not required to be analyzed.
R	Rejected data. The QC parameters indicate that the data is not usable for any purpose.	Rejected data. The QC parameters indicate that the data is not usable for any purpose.

APPENDIX C

IEPA 4/11 – 13/06 Sample Event Photographs



DUNAVAN OIL CO

DATE 04 11 06

TIME 0830

SAMPLE X101

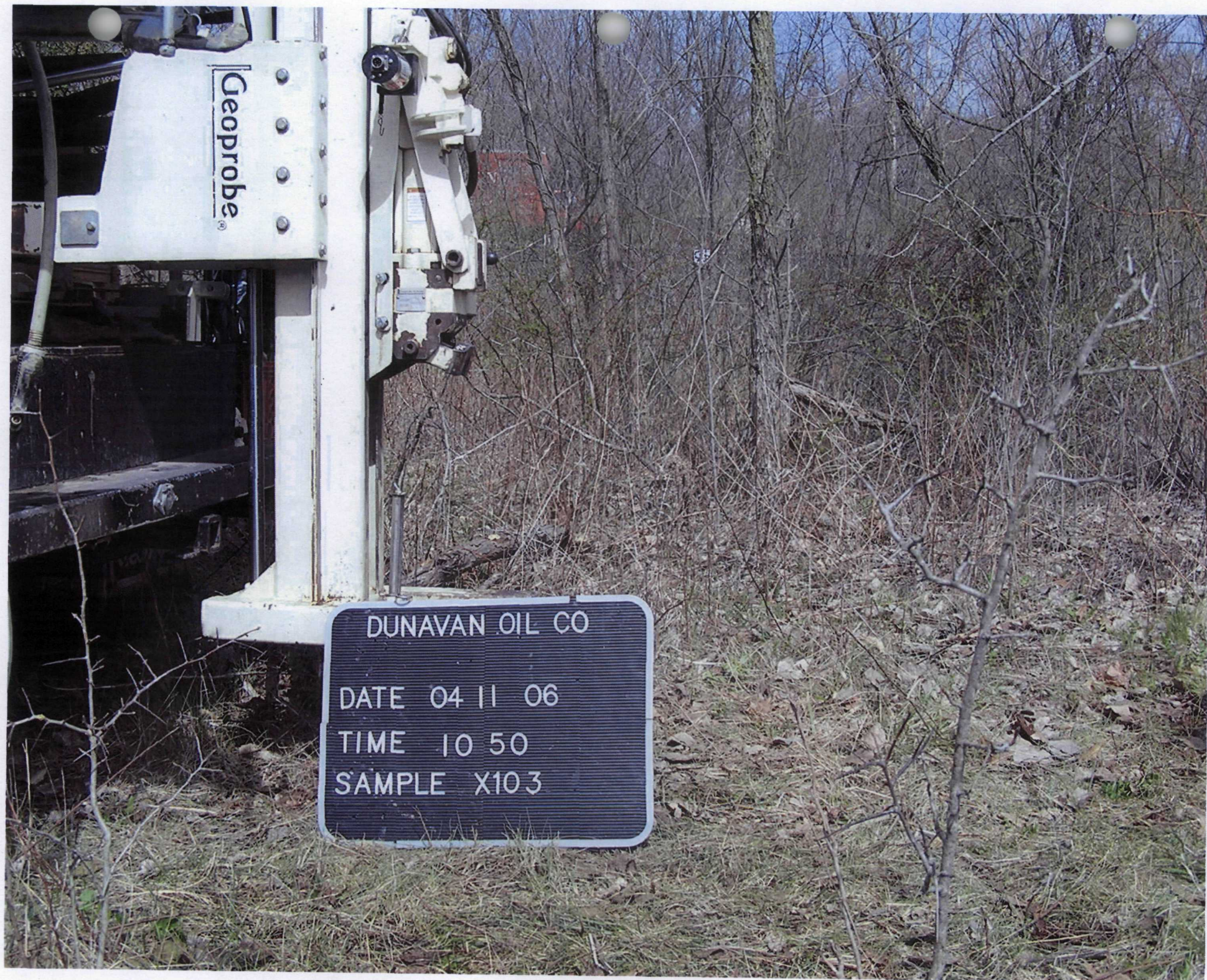
A photograph of an oil field site. In the foreground, a black rectangular data plate with white text is placed on the ground. The text on the plate reads: "DUNAVAN OIL CO", "DATE 04 11 06", "TIME 0830", and "SAMPLE X101". Behind the plate, there is a white bucket and an orange metal frame. To the right, a black metal structure, possibly part of an oil pumpjack, is visible. The background consists of a dense forest of bare trees, suggesting a late autumn or winter setting. The ground is covered with dry leaves and grass.

DUNAVAN OIL CO
DATE 04 11 06
TIME 0830
SAMPLE X101









Geoprobe®

DUNAVAN OIL CO

DATE 04 11 06

TIME 10 50

SAMPLE X103



DUNAVAN OIL CO

DATE 04 11 06

TIME 11 35

SAMPLE X104

A photograph of an oil well site. In the foreground, a black sign with white text is placed on the ground. To the left of the sign is an orange metal A-frame structure. To the right is a large piece of industrial machinery, likely part of an oil pumpjack. The background consists of a field of dry, brown grass and bare trees under a clear sky.

DUNAVAN OIL CO
DATE 04 11 06
TIME 11 35
SAMPLE X104



DUNAVAN OIL CO
DATE 04 11 06
TIME 12 15
SAMPLE X105





DUNAVAN OIL CO

DATE 04 11 06

TIME 13 10

SAMPLE X106



DUNAVAN OIL CO

DATE 04 11 06

TIME 13 10

SAMPLE X106



DUNAVAN OIL CO

DATE 04 11 06

TIME 14 00

SAMPLE X107

Geoprobe®

DUNAVAN OIL CO

DATE 04 11 06

TIME 14 00

SAMPLE X107





Geoprobe®

DUNAVAN OIL CO
DATE 04 11 06
TIME 1505
SAMPLE X108





A photograph of a wooded area with a black sign in the foreground and a piece of machinery on the right. The sign contains the following text:

DUNAVAN OIL CO

DATE 04 11 06

TIME 15 40

SAMPLE X109

The background shows a forest of bare trees with a layer of fallen leaves on the ground. A piece of white machinery is visible on the right side of the image.







DUNAVAN OIL CO

DATE 04 11 06

TIME 1725

SAMPLE G10 2

DUNAVAN OIL CO
DATE 04 11 06
TIME 1725
SAMPLE G10 2





DUNAVAN OIL CO

DATE 04 12 06

TIME 8 50

SAMPLE X110

A photograph of an industrial site, likely an oil well. In the foreground, a black data plate with white text is positioned on the ground. To the left of the plate is a red metal tripod stand. In the background, a large, complex industrial machine, possibly a pumpjack or similar equipment, is visible. The machine has various pipes, valves, and a red circular component. The surrounding area is overgrown with green grass and bare trees, suggesting a rural or undeveloped location. The sky is overcast.

DUNAVAN OIL CO

DATE 04 12 06

TIME 8 50

SAMPLE X110



DUNAVAN OIL CO

DATE 04 12 06

TIME 9 50

SAMPLE X111
X112

A photograph of an outdoor site. In the foreground, a black rectangular sign with white text is placed on the ground. To the left of the sign is a red metal frame structure. To the right is a white machine, possibly a drill or pump. The background consists of a dense thicket of green bushes and trees. The ground is covered with grass and some dry leaves.

DUNAVAN OIL CO

DATE 04 12 06

TIME 9 50

SAMPLE X111

X112



DUNAVAN OIL CO

DATE 04 12 06

TIME 10 00

SAMPLE G206



DUNAVAN OIL CO

DATE 04 12 06

TIME 10 00

SAMPLE G206



DUNAVAN OIL CO

DATE 04 12 06

TIME 1040

SAMPLE X113



DUNAVAN OIL CO

DATE 04 12 06

TIME 1040

SAMPLE X113

DUNAVAN OIL CO
DATE 04 12 06
TIME 1040
SAMPLE X113





DUNAVAN OIL CO

DATE 04 12 06

TIME 1220

SAMPLE S102









DUNAVAN OIL CO

DATE 04 12 06

TIME 1355

SAMPLE X114

DUNAVAN OIL CO

DATE 04 12 06

TIME 1355

SAMPLE X114





DUNAVAN OIL CO

DATE 04 12 06

TIME 14 20

SAMPLE G104 &
G189



DUNAVAN OIL CO

DATE 04 12 06

TIME 14 20

SAMPLE G104 &
G189



DUNAVAN OIL CO

DATE 04 12 06

TIME 14 50

SAMPLE G105



DUNAVAN OIL CO

DATE 04 12 06

TIME 14 50

SAMPLE G105



DUNAVAN OIL CO

DATE 04 12 06

TIME 16 45

SAMPLE X115

DUNAVAN OIL CO
DATE 04 12 06
TIME 16 45
SAMPLE X115



A photograph of a wooded stream bed. The ground is covered with dry, brown leaves and fallen branches. A black data tag with white text is placed in the foreground. The background shows a dense forest with thin tree trunks and some green foliage.

DUNAVAN OIL CO

DATE 04 12 06

TIME 1720

SAMPLE S106

A black and white photograph of a wooded area. In the foreground, a black rectangular marker with white text is placed on the ground. The marker contains the following information: "DUNAVAN OIL CO", "DATE 04 12 06", "TIME 1720", and "SAMPLE S106". The ground is covered with dry leaves and twigs. In the background, there are many trees with bare branches, suggesting a late autumn or winter setting. A person's leg and arm are partially visible on the left side of the frame.

DUNAVAN OIL CO
DATE 04 12 06
TIME 1720
SAMPLE S106



DUNAVAN OIL CO

DATE 04 12 06

TIME 1740

SAMPLE S107

A black and white photograph of a wooded area. The ground is covered in a thick layer of fallen leaves and some small green plants. In the foreground, a black rectangular tag with white text is visible. The tag contains the following information: "DUNAVAN OIL CO", "DATE 04 12 06", "TIME 1740", and "SAMPLE S107". In the background, there are trees and a small stream or ditch. A black bag or container is lying on the ground near the stream.

DUNAVAN OIL CO

DATE 04 12 06

TIME 1740

SAMPLE S107



DUNAVAN OIL CO
DATE 04 12 06
TIME 18 00
SAMPLE S108





DUNAVAN OIL CO
DATE 04 13 06
TIME 8 30
SAMPLE X116



DUNAVAN OIL CO

DATE 04 13 06

TIME 8 30

SAMPLE X116



DUNAVAN OIL CO
DATE 04 13 06
TIME 845
SAMPLE X117



A black and white photograph of a forest floor. The ground is covered with a thick layer of fallen leaves and some small green plants. Several thin tree trunks are visible in the background. A black rectangular tag with white text is placed on the ground in the lower right foreground.

DUNAVAN OIL CO

DATE 04 13 06

TIME 9 0 0

SAMPLE X 118



DUNAVAN OIL CO

DATE 04 13 06

TIME 9 0 0

SAMPLE X118



DUNAVAN OIL CO

DATE 04 13 06

TIME 1005

SAMPLE S103







DUNAVAN OIL CO
DATE 04 13 06
TIME 11 00
SAMPLE S104 &
S105



DUNAVAN OIL CO

DATE 04 13 06

TIME 11 00

SAMPLE S104 &
S105

APPENDIX D

Analytical Results from 1995 STEP Investigation

TABLE 4 DUNAVAN OIL KEY SOIL/SEDIMENT SAMPLE SUMMARY

SAMPLING POINT	Soil Remediation Objectives	X101	X102	X103	X104	X105	X106	X107	X108	X109	X110	X201	X202	X203	X204
pH (in Lab)	Commercial	11-29-95 Soil 4.8	11-29-95 Soil 7.0	11-29-95 Soil 7.7	11-30-95 Soil 7.2	11-29-95 Soil 7.8	11-29-95 Soil 7.9	11-29-95 Soil 7.9	03-22-95 Soil 7.1	03-22-95 Soil 7.7	(Background) 03-22-95 Soil 7.2	03-23-95 Sediment 7.5	03-23-95 Sediment 6.4	03-23-95 Sediment 6.6	(Background) 03-23-95 Sediment 7.2
VOLATILES				13											
1,1,1-Trichloroethane	1200000	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
SEMIVOLATILES															
Naphthalene	84000	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
2-Methylnaphthalene	8200000	83 J	150 J	52 J	61 J	47 J	70 J	70 J	---	---	---	---	---	---	---
Acenaphthylene	---	380 J	---	170 J	120 J	170 J	250 J	250 J	---	---	---	---	---	---	---
Dibenzofuran	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Phenanthrene	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Anthracene	12000000	470 J	260 J	420 J	280 J	220 J	250 J	250 J	---	---	---	---	---	---	---
Fluoranthene	8200000	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Pyrene	4200000	170 J	96 J	230 J	520 J	150 J	120 J	120 J	---	---	---	---	---	---	---
Benzofluoranthene	8000	250 J	150 J	380 J	1500 J	270 J	210 J	210 J	---	---	---	---	---	---	---
Chrysene	160000	100 J	65 J	160 J	1000 J	120 J	94 J	94 J	---	---	---	---	---	---	---
Benzofluoranthene	8000	190 J	100 J	250 J	1700 J	160 J	140 J	140 J	---	---	---	---	---	---	---
Benzofluoranthene	8000	250 J	140 J	270 J	2800 J	240 J	180 J	180 J	---	---	---	---	---	---	---
Benzofluoranthene	8000	250 J	150 J	310 J	3100 J	280 J	200 J	200 J	---	---	---	---	---	---	---
Benzofluoranthene	800	87 J	---	150 J	1700 J	120 J	91 J	91 J	---	---	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8000	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dibenz(a,h)anthracene	14000	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzofluoranthene	800	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzofluoranthene	2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PESTICIDES															
alpha-BHC	0.5	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
beta-BHC	---	0.19 JP	0.4 JP	0.68 JP	1.4 JP	1 JP	0.07 P	0.07 P	---	---	---	---	---	---	---
delta-BHC	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
gamma-BHC (Lindane)	4000	0.74 JP	0.97 JP	1 JP	0.73 JP	0.88 JP	0.37 JP	0.37 JP	0.17 JP	0.18 JP	0.18 JP	0.14 JP	1.3 JP	0.97 JP	0.18 JP
Heptachlor	23000	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Aldrin	500	5.2 P	5.1 P	5.6 P	11 P	16	5.8 P	5.8 P	---	---	---	---	---	---	---
Heptachlor epoxide	300	150 JP	2 JP	2.4 P	2.4	3	1.4 J	1.4 J	---	---	---	---	---	---	---
Endosulfan I	---	---	0.55 JP	0.55 JP	0.55 JP	0.55 JP	0.55 JP	0.55 JP	---	---	---	---	---	---	---
Endosulfan II	400	0.55 JP	0.55 JP	0.55 JP	0.55 JP	0.55 JP	0.55 JP	0.55 JP	---	---	---	---	---	---	---
Endosulfan III	1000	0.26 JP	0.6 JP	0.96 JP	0.22 JP	0.34 JP	1.5 JP	1.5 JP	0.18 JP	0.18 JP	0.18 JP	0.16 JP	---	---	---
4,4'-DDT	16000	4.2 JP	1.1 JP	1.1 JP	1.9 JP	5.3 JP	1.5 JP	1.5 JP	0.4 J	0.4 J	0.4 J	0.19 JP	---	---	---
4,4'-DDE	32000	1.1 JP	2.8 JP	1.8 JP	2.7 JP	1.3 JP	0.32 JP	0.32 JP	---	---	---	---	---	---	---
Nonachlor	100000	5.5 JP	3.3 JP	1.6 JP	6.6 P	6.8 P	2.7 JP	2.7 JP	0.29 JP	0.33 J	0.33 J	0.7 JP	---	---	---
Endosulfan	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
alpha-chlordane	---	0.62 J	0.65 JP	0.8 JP	0.3 P	0.22 JP	1.2 J	1.2 J	0.12 JP	0.21 JP	0.21 JP	---	---	---	---
gamma-Chlordane	---	0.36 JP	0.38 JP	0.46 JP	1.1 P	0.3 J	5.6 P	5.6 P	---	---	---	---	---	---	---
INORGANICS															
Antimony	82	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Calcium	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Copper	8200	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Iron	400	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Lead	---	92.7	---	98.8	84.6	73	87.1	87.1	---	---	---	---	---	---	---
Magnesium	---	0.16	0.24	---	0.18	83.3 B	94.1 B	94.1 B	0.08 B	1.2	22.8	---	---	---	---
Mercury	61	96.4 B	73.7 B	113 B	73 B	---	---	---	---	---	---	---	---	---	---
Sodium	---	1.9 B	2.1 B	0.48 B	0.23 B	---	0.22 B	0.22 B	---	97.1 B	20.5 B	---	---	---	---
Thallium	180	---	---	---	---	---	---	---	---	---	---	---	---	---	---

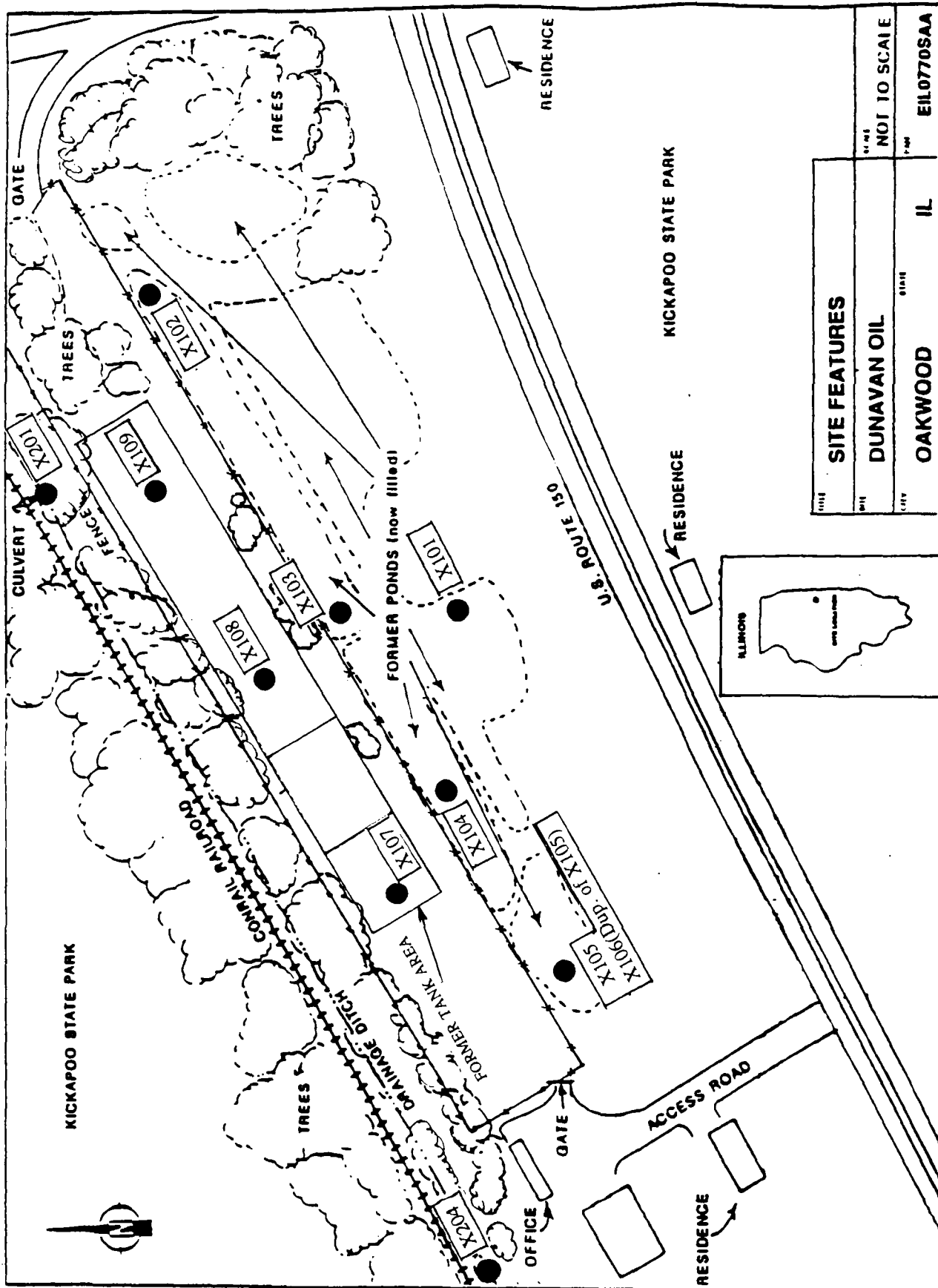
All constituents and associated concentrations listed are at least 3 times background levels (X110 soil/X204 sediment).
 Constituent concentrations highlighted in red are above TACO Tier I soil remediation objectives for industrial/commercial properties.
 Constituent concentrations highlighted in blue are above TACO Tier I migration to groundwater remediation objectives for Class 1 groundwater.
 * remediation objectives are based on pH values in each individual sample therefore varying the specific objective value

TABLE 3 DUNAVAN OIL KEY DRINKING WATER SAMPLE SUMMARY

SAMPLING POINT	Tier 1 Groundwater Remediation Objectives	G201 03-22-95 Water	G202 03-22-95 Water	G203 03-22-95 Water
pH (in field) pH (in Lab)		6.9 na	6.7 na	6.7 na
VOLATILES	----	No contaminants present	No contaminants present	No contaminants present
SEMIVOLATILES				
bis(2-Ethylhexyl)Phthalate	6	-- ug/L	-- ug/L	15 ug/L
PESTICIDES	----	No contaminants present	No contaminants present	No contaminants present
INORGANICS				
Barium	2000	18	11	--
Calcium	----	119000	24000	1000
Copper	650	--	--	19
Iron	5000	337	886	--
Magnesium	----	68000	18000	58400
Manganese	150	107	141	--
Potassium	----	--	6000	--
Sodium	----	131000	576000	537000
Zinc	5000	-- ug/L	57 ug/L	74 ug/L

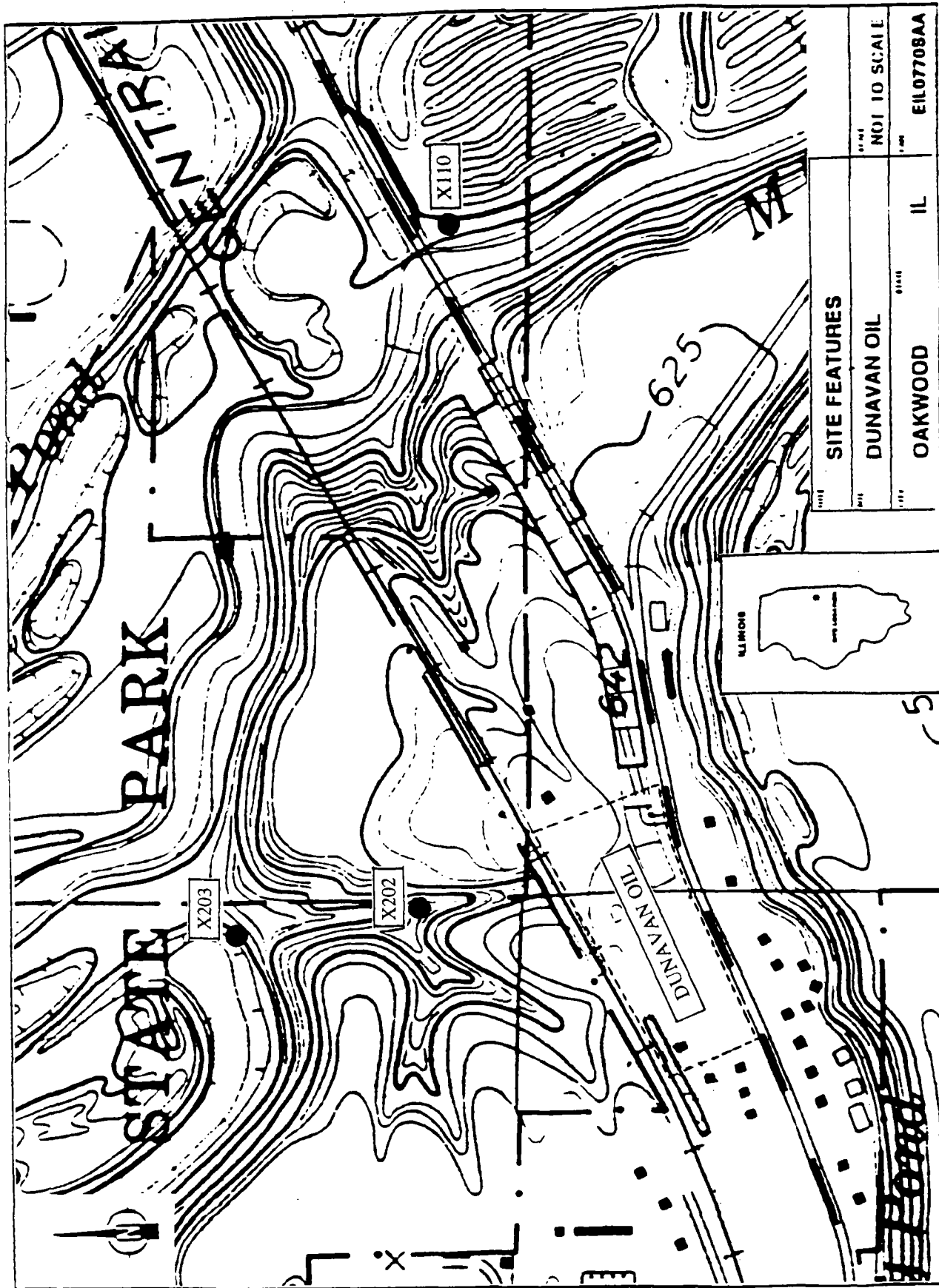
Water samples are from residential wells located less than 1/4 mile from site.

Constituent concentrations highlighted in **blue** are above the Tier I Groundwater Remediation Objectives



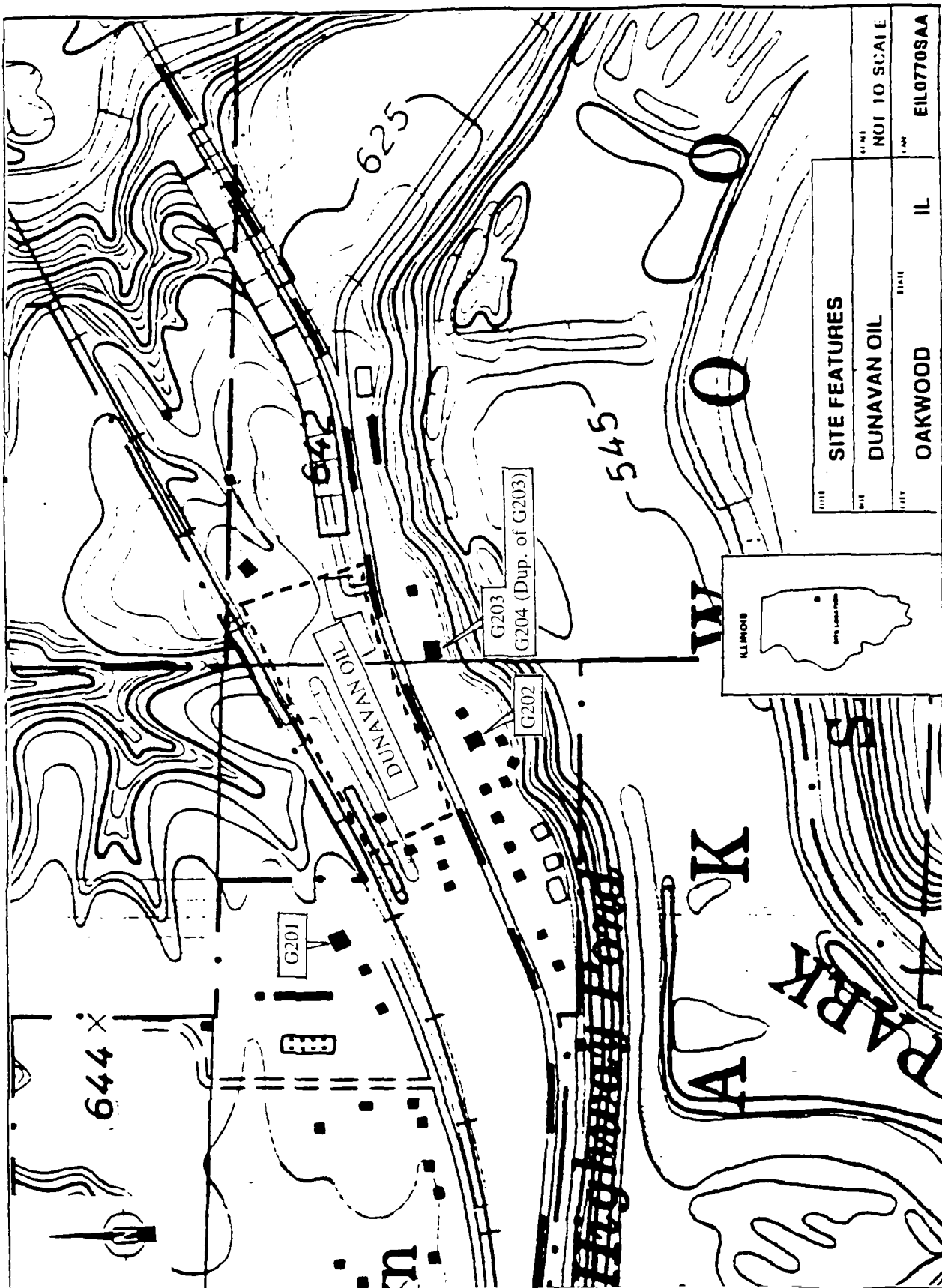
SOIL/SEDIMENT
SAMPLE LOCATIONS

Figure 5



SOIL/SEDIMENT
SAMPLE LOCATIONS

Figure 6



PRIVATE WELL
SAMPLE LOCATIONS

Figure 7

APPENDIX E

ESI (4/06) Analytical Results
(Under separate cover in Volume 2 of this report)